

**Volume**

**#**

**R0392**

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Township 23 South, Range 24 East

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# FIELD NOTES

OF THE SURVEY OF THE

Of the ..... Meridian,

In the State of .....

EXECUTED BY

In the capacity of U. S. Surveyor...., under instructions dated....., 191...., issued by the United States Surveyor General to govern surveys included in Group No. ...., which were approved by the Commissioner of the General Land Office, ...., 191..., pursuant to authority contained in the Act of Congress dated ...., 191....

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## FIELD NOTES

OF THE SURVEY OF THE

Of the ..... Meridian,

In the State of .....

EXECUTED BY

In the capacity of U. S. Surveyor ...., under instructions dated ...., 191 ..., issued by the United States Surveyor General to govern surveys included in Group No. ...., which were approved by the Commissioner of the General Land Office ...., 191 ..., pursuant to authority contained in the Act of Congress dated ...., 191 ...

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# FIELD NOTES

OF THE SURVEY OF THE

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In the State of .....

EXECUTED BY

In the capacity of U. S. Surveyor ....., under instructions dated ....., 191 .....,  
issued by the United States Surveyor General to govern surveys included in  
Group No. ...., which were approved by the Commissioner of the General Land  
Office, ...., 191 ....., pursuant to authority contained in the Act of  
Congress dated ....., 191 .....

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Oba. MFY.  
Ex. GN.

4-670

Book "E"

## FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION AND MEANDERS

TOWNSHIP 23 SOUTH, RANGE 24 EAST,

of the SALT LAKE BASE AND Meridian,

In the State of UTAH.

EXECUTED BY

HOWARD E. MILLER

In the capacity of U.S. Surveyor, under instructions dated March 27, 1911,  
issued by the United States Surveyor General to govern surveys included in  
Group No. 11, which were approved by the Commissioner of the General Land  
Office, April 20, 1911, pursuant to authority contained in the Act of  
Congress dated ..., 1911.

Survey commenced July 6, 1911.

Survey completed July 18, 1911.

## INDEX DIAGRAM.

Township 23 South Range 24 East

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Meanders of Dolores River, pages 37 to 42.

Meanders of Grand River, pages 43 to 49.

Subdivision of T. 23 S., R. 24 E.

Survey commenced July 6, 1911 and executed with a W. & L. E. Gunley solar compass No. 1043.

For description and test of instrument see book "A" of this survey.

I examine the adjustments of the compass and correct the level and collimation errors, then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours with a meridian established by observations on Polaris, I proceed as follows.

At the cor. of secs. 13, 18, 19 and 24 on the east bdy of the sp., which I established May 24, 1911, in latitude  $38^{\circ} 49' N.$ , longitude  $109^{\circ} 19' 10'' W.$ ; I set off  $38^{\circ} 49'$  on the latitude arc,  $22^{\circ} 41' 5'' N.$ , on the decl. arc; and at  $17^h 34^m$  p.m. l.m.t., determine with the solar a meridian, and mark a point in the line thus determined on a stone, formerly set 5 chs. N. of the cor.

July 6, 1911

July 7: At  $12^h 34^m$  a.m. l.m.t., I observe Polaris at Eastern elongation, in accordance with the Manual of Instructions and mark a point in the line thus determined on a peg driven in the ground, 5 chs. N. of my station.

At  $7^h 34^m$  a.m. l.m.t., I lay off the azimuth of Polaris  $1^{\circ} 30'$  to the west, and find that my Polaris meridian coincides with the solar meridian of July 6.

At  $8^h 04^m$  a.m. l.m.t., I set off  $38^{\circ} 49'$  on the lat. arc,  $22^{\circ} 41' N.$  on the

Subdivision of T. 23 S., R. 24 E.

chain

decl. arc; - and determine a meridian with the solar, - and find that this meridian also agrees with the meridian established by observations upon Polaris and with the solar meridian of July 6, 1911, I therefore conclude that the instrument is in perfect adjustment. The magnetic bearing of the true meridian at  $8^{\circ} 15'$  is  $N 15^{\circ} 15' W.$ , which gives the magnetic decl.  $15^{\circ} 15' E.$ .

From the sec. cor. already described  
I run

West, bet. secs. 13 + 24.

Over level land in bottom of Holores Canyon, through under-growth of sage brush.

8.90 Cottonwood Wash, 50 eks. wide,  
10 ft. deep, course NE.

19.00 Base of ridge, near mouth of cottonwood canyon, bears  $N. 20^{\circ} W.$ , and SE ascend abruptly over ledges.

27.00 Top of Bench, 130 ft. above base,  
bears NE. and SW.

Gradually ascend,

40.00 At base of 30 ft. ledge.  
Set an iron post, 3 ft. long, 1 in. in dia, 26 lbs. in a mound of stone 4 ft. base, 2 ft. high for  $\frac{1}{4}$  sec. cor., marked on brass cap,  $\frac{1}{4} S \frac{1}{3}$  on N. half and  $S \frac{2}{3}$  on S. half, raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high N. of cor.

Pits impracticable

Note; on account of natural obstacles I am unable to set post in the ground.

41.00 Top of ledge bears N. + S

Subdivision of T. 23 S., R. 24 E.

chains	
	Ascend SE. face ridge over huge boulders
79.00	Top of ridge, 560 ft. above canyon braes NE. and SW.
	Descend.
80.00	At base of 25 ft. ledge. Set an iron post, 3 ft. long, 2 in. in dia., 24 in. in a mound of stone 4 ft. base, 2 ft. high for cor. of secs. 13, 14, 23 and 24, marked on brass cap T 23 S S 14 in NW. R 24 E S 13 in NE, S 24 in SE, and S 23 in SW. quadrant, raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor. Pits impracticable Note: On account of natural obstacles I am unable to set post in the ground. Land mountainous and level. Soil, rocky and sandy loam; 4 <sup>th</sup> and 1 <sup>st</sup> rates. Timber, a few scattering cedar. Undergrowth, sage brush. E. 19 chs. level bottom land in canyon covered with dense undergrowth of sage brush. Soil, rich sandy loam with a deep sand sub soil; 1 <sup>st</sup> rate. This land may be cultivated Mountainous land, 61.00 chs.

71.0° of W., bet. secs. 13 and 14.  
Gradually descend over broken mountain top, through scattering forest of cedar and piñon and undergrowth of shadscale.

36.00 Wash, 10 lcs. wide, 3 ft. deep,

Subdivision of T. 23 S., R. 24 E.

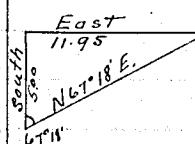
	chains	
		course N.E. 2 chs., thence N. Ascend 30 ft. to
40.00		On top low spur, projects E. Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4} S 14$ on W. half and $S 13$ on E. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable No trees within limits Thence over land facing nearly E.
65.00		Low ridge, bears N.E. and S.W. Gradually descend.
80.00		At Base of south side knoll. Set an iron post, 3 ft. long, 2 in. in dia., 24 ins. in a mound of stone, 1 ft. base, 2 ft. high for cor. of secs. 11, 12, 13 and 14; marked on brass cap $T 23 S 11$ in NW, $R 24 E S 12$ in NE, $S 13$ in SE. and $S 14$ in SW. quadrant, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable Note: On account of natural obstacles I am unable to set post in the ground. Land, Mountainous with a general North drain Soil, gravelly and rocky on rocky sub-soil, 4 <sup>th</sup> rate Timber, some scrub cedar and juniper. Undergrowth, short shadscale. Mountainous or timbered land 80.00 chs. July 7: At this sec. cor. I set off

Subdivision of T. 23 S., R. 24 E.

chains

$22^{\circ} 40' N.$ , on the decl. arc, and at  $12^{\text{h}} 04^{\text{m}}$  p.m. l.m.t., observe the sun on the meridian; the resulting lat. is  $38^{\circ} 50.5'$

- East, on random line bet. secs. 12 and 13.
- 40.00 Set temporary  $\frac{1}{4}$  sec. cor.  
Left. bank Molores river. Course  $N. 65^{\circ} W.$   
Set temporary meander cor.  
To determine distance across river  
I set a flag on line on right bank,  
then measure a base line South,  
5 chs. to a point from which flag  
bears  $N. 67^{\circ} 18' E.$ , from the flag the  
south end of base bears.  $S. 67^{\circ} 18' W.$ ,  
therefore tan.  $67^{\circ} 18' \times$  base or  $2.39 \times$   
 $5 = 11.95$  chs., which added to 62.30  
chs., makes.
- 74.25 Right bank Molores. river, course  $N. 70^{\circ} W.$   
Set temporary meander cor.  
Intersect E. bdy. of the tp. 12 lks. S.  
of the cor. of secs. 7, 12, 13 and 18  
heretofore described.  
Hence, I run  
 $S. 89^{\circ} 55' W.$ , on true line bet. secs. 12  
and 13.
- 11.95 Ascend over rocky land facing S.  
Base of mountain and right  
bank of Molores river  
Set an iron post, 3 ft. long, 1 in. in  
dia., 26 lbs. in the ground for  
meander cor. of fract. secs. 12 and  
13, marked on brass cap T 23 S.  
R 24 E S 12 M C on N. half and  
S 13 on S. half, raise a mound  
of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high E. of  
cor.



Subdivision of T. 23 S., R. 24 E.

Chancis

- Pits impracticable.
- 17.70 Left bank of Dolores river,  
Set an iron post, 3 ft. long, 1 in. in  
dia., 26 ins. in the ground for  
meander cor. frac! secs. 12 and 13  
marked on brass cap T 23 S R 24 E  
S 12' on N. half, and S 13' M C on S.  
half, raise a mound of stone, 2 ft.  
base,  $1\frac{1}{2}$  ft. high W. of cor.
- Pits impracticable
- Ascend abruptly over rocky land  
facing east
- 31.00 Top of narrow brush, 250 ft. above  
river, bears N. + S.
- Gradually descend
- 39.00 Wash, 15 lks. wide, 1 ft. deep course N.
- Ascend abruptly
- 40.00 Set an iron post, 3 ft. long, 1 in.  
in dia., 26 ins. in a mound of  
stone 4 ft. base, 2 ft. high for  $\frac{1}{2}$  sec.  
cor., marked on brass cap  $\frac{1}{4}$  S  
12' on N. half and S 13' on S. half,  
raise a mound of stone, 2 ft base,  
 $1\frac{1}{2}$  ft. high N. of cor.
- Pits impracticable
- 48.50 Top of ridge and mountain top,  
37.5 ft. above river, bears N. + S.  
Hence over land facing nearly  
N.
- 56.80 Wash, 15 lks. wide, 10 ft. deep,  
course N.
- 70.90 Wash, 20 lks. wide, 3 ft. dep,  
course N.
- 80.00 The cor. of secs. 11, 12, 13 + 14.  
Land, mountainous with a  
general drain to the north  
Soil, rocky and gravelly on rocky  
sub-soil; 4<sup>th</sup> rate.  
Timber, a few scattering cedar and  
juniper on W. 31.50 chs.

Subdivision of T. 23 S., R. 24 E.

chains

Undergrowth, some short shadscale.  
Mountainous land 8000 ft.

July 7, 1911

July 10: At 8<sup>h</sup>. 35<sup>m</sup>. a.m. l.m.t., I set off  $38^{\circ} 49'$  on the lat. arc,  $22^{\circ} 21' N.$ , on the decl. arc, and determine a meridian with the solar at the cor. of secs. 13, 14, 23 and 24

Hence I run

West, bat. secs. 14 + 23.

Over mountainous land, through scattering forest of scrub cedar and pinyon

descend 175 ft to

16:25 Hollow, drains NW.

Ascend 75 ft. to

33.00 Low ridge, bears N. + S.

descend 5.0 ft. to

39.25 Wash, 10 lks. wide, 3 ft. deep,  
course N.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 in. in the ground for  $\frac{1}{14}$  sec. cor., marked on brass cap  $\frac{1}{14} S \frac{1}{14}$  on N. half and  $S \frac{2}{3}$  on S. half, raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high N. of cor.

Pits impracticable

44.10 Wash, 15 lks. wide, 3 ft. deep,  
course N.

Ascend

67.50 Ridge, 7.5 ft. high, bears N. + S.  
descend

70.00 Wash, 10 lks. wide, 2 ft. deep,  
course N.

Ascend 5.0 ft. to

77.00 Spur, projects NW.

descend abruptly, 60 ft to

80.00 Set an iron post, 3 ft. long, 2 in.

## Subdivision of T. 23 S.R. 34 E.

Chains

in dia., 24 ins. m a mound of stone, 4 ft. base, 2 ft. high for cor. of secs. 14, 15, 22 and 23, marked on brass cap

T 23 S S 15 m NW,

R 24 E S 14 m NE,

S 23 m SE.

S 22 m SW. quadrant,

raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.

Pits impracticable

Note: On account of natural obstacles I am unable to set post in the ground.

Land mountainous with a general N. drain.

Soil, rocky on rocky sub-soil; 4<sup>th</sup> rate

Timber, some scattering cedar and piñon.

Undergrowth, some short shadscale.

Mountainous land \$0.00 a/c.

West, bet. secs. 15 and 22.

Over mountainous land, through scattering forest of cedar and piñon and undergrowth of short shadscale

Descend.

2.80 Wash. 10 lks. wide, 2 ft. deep, course NW.

14.80 Wash, 15 lks. wide, 1 ft. deep, course N.

35.95 East side of Cow Skin Canyon, bears N. & S.

Descend abruptly over ledges and boulders.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. m a mound of stone 4 ft base, 2 ft. high for  $\frac{1}{2}$

Subdivision of T. 23 S., R. 24 E.

	chain:	
		sec. cor., marked on brass cap $\frac{1}{4}$ S 15° on N. half and S 22° on S. half, raise a mound of stone, 2 ft. base, $\frac{1}{2}$ ft. high N. of cor. Pits impracticable
		Note: On account of natural obstacles I am unable to set post in the ground
149.50		Wash in Cow Skin Canyon, 75 lks. wide, 375 ft. below top, coarse N. Ascend abruptly
58.00		Spir., 100 ft. above canyon wash, projects NE. Descend abruptly.
68.20		Wash in fork of canyon, 20 lks. wide, 100 ft. deep, coarse N.E. Ascend abruptly.
78.00		Top of bench on west side of canyon, 300 ft. above base, bears N.E. + S.W.
80.00		Gradually ascended. Set an iron post, 3 ft. long, 2 in. in dia., 24 ins. in the ground for cor. of secs. 15, 16, 21 and 22, marked on brass cap
		T 23 S 16° mi NW, R 24 E S 15° mi NE, S 22° mi SE. and S 21° mi SW. quadrant,
		raise a mound of stone, 2 ft. base $\frac{1}{2}$ ft. high W. of cor. Pits impracticable
		Land, mountainous with a general N. drain
		Soil, rocky on rocky sub-soil; 4 <sup>th</sup> rate.
		Timber, a few scattering cedar and juniper.
		Mudgrowth some short shadecase.

Subdivision of T. 23 S., R. 25 E.

	chain
	mountainous land 80.00 chs. July 10: At this sec. cor. I set off. $22^{\circ} 19' N.$ , on the decl. arc., and at $12^{\text{h}} 05^{\text{m}}$ p.m. l.m.t., observe the sun on the meridian, the resulting lat. is $38^{\circ} 14'$
West, bet. secs. 16 and 21.	
	over mountainous land through short undergrowth of shalecale. Gradually ascend.
9.00	Ridge, bears N. and SW. Descend abruptly in Hospital Canyon over ledges and boulders.
25.50	Bottom of canyon and wash. 25 lks. wide, 390 ft. below top, course N. Ascend abruptly.
40.00	Top of narrow ridge on west side of canyon, 725 ft. above base, bears N. + S. Set an iron post, 3 ft. long, 1 in in dia., 26 lbs. in a mound of stone, 2 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4} S 16^{\circ}$ on N. half and $S 21^{\circ}$ on S. half, raise a mound of stone 2 ft. base, $\frac{1}{2}$ ft. high N. of cor. Post impracticable.
	Note: on account of natural obstacles I am unable to set post in the ground.
52.00	Descend abruptly over ledges. Wash, 25 lks. wide and base of ridge, 275 ft. below top, course NW.
	Hence over land facing N.
57.50	Road, from Cisco Utah to Rio Dolores mine, bears N. + S. $30^{\circ} E.$

Subdivision of T. 23 S., R. 24 E.

chain.

- 68.00 Wash, in hollow, 15 lks. wide,  
course NW.  
Ascend 50 ft. to  
Spur, projects N.  
Set an iron post, 3 ft. long, 2 in.  
in dia., 24 ins. in the ground for  
cor. of secs. 16, 17, 20 and 21,  
Marked on brass cap,  
T 23 S 17<sup>m</sup> NW,  
R 24 E S 16<sup>m</sup> NE,  
S 21<sup>m</sup> SE and  
S 20<sup>m</sup> SW quadrant,  
raise a mound of stone, 2 ft.  
base, 1 $\frac{1}{2}$  ft. high W. of cor.  
Pits impracticable  
Land, mountainous with a  
general N. drain  
Soil, rocky and sandy; 4th rate  
Sub-soil, gravelly and rocky.  
Timber, a few cedar and piñon.  
Undergrowth, short shadscale  
Mountainous land, 80.00 chs.

July 10, 1911.

July 11: At 8<sup>h</sup>. 05<sup>m</sup> a.m. l.m.t., I  
set off  $38^{\circ} 49'$  on the lat. arc.,  
 $22^{\circ} 14'$  N., on the decl. arc., and  
determine a meridian with the  
solar at the cor. of secs. 15, 16, 21  
and 22.

Thence I run

$N. 0^{\circ} 02' W.$ , bet. secs. 15 and 16.  
Over mountainous land, through  
scattering forest of cedar and  
piñon.

Ascend 75 ft. to

600 Ridge, brass NW. + SW.

Gradually descend

36.00 Begin steep descent towards  
Molores river

Subdivision of T. 23 S., R. 24 E.

Chain:

40.00 Set an iron post, 3 ft. long, 1 mi. in dia., 26 ins. in the ground for  $\frac{1}{4}$  sec. cor., marked on brass cap  $\frac{1}{4} S 16'$  on W. half and  $S 15'$  on E. half, raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.  
Pits impracticable

Continue to descend.

52.35 Left bank of Dolores river, 140 ft. below  $\frac{1}{4}$  sec. cor.  
Set an iron post, 3 ft. long, 1 mi. in dia., 26 ins. in the ground for meander cor. fract. secs. 15. and 16, marked on brass cap T 23 S R 24 E on N. half, MC  $S 15'$  on E. half and  $S 16'$  on W. half, raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high S. of cor.  
Pits impracticable

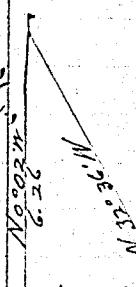
To determine distance across river, I set a flag on right bank, then measure a base line  $N. 89^{\circ} 58' E.$ , 4 chs. dist., to a point from which flag bears  $N. 32^{\circ} 36' W.$ , from the flag the east end of the base bears  $S. 32^{\circ} 36' E.$ , therefore tan  $57^{\circ} 16' \times$  base or  $1.565 \times 4 = 6.26$  chs., which added to 52.35 chs. makes

58.61 " " to right bank of Dolores river at a point in brd from  $N. 24^{\circ} W.$ , to SW.  
Set an iron post, 3 ft. long, 1 mi. in dia., 26 ins. in the ground for meander cor. fract. sec. 16, marked on brass cap

T 23 S R 24 E

$S 16'$  MC  $S 15'$

raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.



189° 58'  
400

# Subdivision of T. 23 S<sup>o</sup>, R. 24 E.

Chains

To determine distance to left bank of river, I set a flag on line on left bank, then measure a base line S. 89° 58' W., 10.00 chs. to a point from which flag bears N. 30° 36' E., from the flag the west end of base bears S. 30° 36' W., therefore tan. 59° 22' × base or  $1.689 \times 10.00 = 16.89$  chs. which added to 58.61 chs., makes 75.50

To left bank of Dolores river on top of 25 ft. ledge.

Set an iron post, 3 ft. long, 1 in. m dia., 26 ms. in a mound of stone 4 ft. base, 2 ft. high for meander cor. fract. secs. 15 and 16, marked on brass cap T 23 S R 24 E on N. half, S 15° on E. half and M C S 16 on W. half, raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor.

Pits impracticable

Note on account of natural obstacles I am unable to set post in the ground.

Gradually ascend.

Spur, projects W.

Set an iron post, 3 ft. long, 2 ms. m dia., 24 ms. in a mound of stone, 4 ft. base, 2 ft. high for cor. of secs. 9, 10, 15 and 16, marked on brass cap

T 23 S S 9. m NW,

R 24 E S 10. m NE,

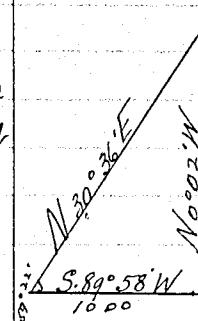
S 15 m SE. and

S 16 m SW. quadrant,

raise a mound of stone 2 ft. base, 1 1/2 ft. high W. of cor.

Pits impracticable

Note, on account of natural obstacles I am unable to set post



Subdivision of T. 23 S., R. 24 E.

chains

in the ground.

Land, mountainous with a general N. and NW. drain.

Soil, rocky on rocky sub-soil; 4<sup>th</sup> rate.

Timber, some scrub cedar and pinon.

Undergrowth, short, shadscale.

Mountainous land 8.00 chs.

N. 0° 02' W., bat. secs. 9 + 10

Over mountainous land facing West, across numerous ridges and draws.

26.40

Left bank of Dolores river.

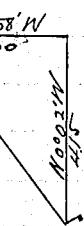
Set an iron post, 3 ft. long, 1 in. in dia., 26 mis. in the ground for meander cor. fract. secs. 9 and 10, marked on brass cap T. 23 S. R. 24 E on N. half, MC S 10 on E half and S 9 on W. half, raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$  ft. high S. of cor.

Pits impracticable

To determine distance across river, I erect a signal at this cor., and place my instrument on line on right bank, then measure a base line S. 89° 58' W., 4.00 chs. to a point where the base subtends an angle of 46° 04' to the flag, therefore tan. 46° 04' x. base or  $1.0379 \times 4 = 4.15$  chs., which added to 26.40 chs., makes

30.55

To right bank Dolores river,  
Set an iron post, 3 ft. long, 1 in. in dia., 26 mis. in a mound of stone 4 ft. base, 2 ft. high for meander cor  
fract. secs. 9 and 10, marked on brass cap T. 23 S. R. 24 E on N. half, S 10 on E. half and MC S 9 on W.



Subdivision of T. 23 S., R. 25 E.

chains.

raise a mound of stone, 2 ft. base,  
 $\frac{1}{2}$  ft. high N. of cor.

Pits impracticable

Note: On account of natural obstacles  
 I am unable to set post in the  
 ground.

Begun steep rocky ascent of south  
 face of mount am.

40.00

200 ft. above river.

Set an iron post, 3 ft. long, 1 in. in  
 dia., 26 lbs. in a mound of stone 4 ft.  
 base, 2 ft. high for  $\frac{1}{4}$  sec. cor.,  
 marked on brass cap  $\frac{1}{4}$  S 9° on  
 W. half and S 10° on E. half, raise  
 a mound of stone, 2 ft. base,  $\frac{1}{2}$   
 ft. high W. of cor.

Pits impracticable

Note: on account of natural  
 obstacles I am unable to set post  
 in the ground.

49.50

Top of high ridge and mount am  
 top, 400 ft. high, bears E. and S. 35°  
 W.

Gradually descend

54.00

Wash, 10 lks. wide, 1 ft. deep,  
 course NE.

57.00

Wash, 10 lks. wide, 1 ft. deep,  
 course NE

Ascend 50 ft. to

62.00

Spur, projects NE.

Gradually descend

71.40

Wash, 15 lks. wide, 1 ft. deep,  
 course NE.

80.00

Set an iron post, 3 ft. long, 2 lbs  
 in dia., 24 lbs. in a mound of  
 stone, 4 ft. base, 2 ft. high for  
 cor. of secs. 3, 4, 9 and 10,  
 marked on brass cap

T 23 S S 4 in NW,

R 24 E S 3 in NE,

Subdivision of T. 23 S., R. 24 E.

chanc	S 10 mi SE. and S 9 mi SW. quadrant, raise a mound of stone, 2 ft. base, 1/2 ft. high W. of cor. Pits impracticable Note: On account of natural obstacles I am unable to set post in the ground. Land, mountainous Soil, rocky or rocky sub-soil; 4 <sup>th</sup> rate. No timber Mudcray growth, some short shadscale. Mountainous land, 8000 chs. June 11: At this sec. cor. I set off $22^{\circ} 12' N.$ , on the decl. arc. and at $12^{\text{h}} 05^{\text{m}} \text{ p.m. l.m.t.}$ , observe the sun on the meridian, the resulting lat. is $38^{\circ} 50'$
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From the cor. of secs. 16, 17, 20  
and 21, I run

$N. 0^{\circ} 03' W.$ , bet. secs. 16 + 17.

Over broken land, through  
short undergrowth of shadscale.  
Ascend.

Warming Canyon, 50 ft. dep.,  
course  $N. 20^{\circ} E.$ .

Ascend 75 ft. to

Ridge, bears NE. and SW.  
Descend.

20.00 Road, from Cisco, Utah to Rio  
Grande, bears E. and W.  
A bridge over Warming Canyon,  
bears E 2 chs.

21.00 Wash, 10 lks. wide, course E.  
Ascend 50 ft to

28.00 Ridge, bears  $N. 20^{\circ} E.$  and SW.  
Gradually descend along west  
side of solid sandstone bed rock.  
Set an iron post, 3 ft. long, 1 in. in

Subdivision of T. 23 S., R. 24 E.

chain's

dia., 26 in. in the ground for  $\frac{1}{4}$  sec. cor., marked on brass cap  
 $\frac{1}{4}$  S 17 on W. half and S 16 on E.  
 half, dig pits,  $18 \times 18 \times 12$  in., N. & S.  
 of post 3 ft. dist., raise a mound  
 of earth  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high W.  
 of cor.

45.60 Wash, 10 lks. wide, 2 ft. deep,  
 course NE.

49.30 Wash, 10 lks. wide, 1 ft. deep,  
 course NE.

Ascend: 30 ft. to

54.50 Spur, projects NE. descend.

56.50 Wash at mouth into Mearns  
 canyon, 20 lks. wide, course NE.  
 thence in bottom of Mearns Canyon.

64.90 Road, from Cisco, Utah to Mearns  
 ranch, bears NE. and SW.

68.90 Wash, 40 lks. wide, course NE.  
 Ascend from cany on

72.00 Ledge, 70 ft. high, bears NE. and  
 SW.

76.00 Spur, 75 ft. high, projects NE.  
 descend 50 ft. to

78.30 Wash, 15 lks. wide, course E.  
 Ascend.

80.00 Set an iron post, 3 ft. long, 2 in.  
 in dia., 24 in. in a mound of  
 stone, 4 ft. base, 2 ft. high for  
 cor. of secs. 8, 9, 16 and 17, marked  
 on brass cap

T 23 S 8 in NW,

R 24 E S 9 in NE,

S 16 in SE and

S 17 in SW quadrant,

raise a mound of stone, 2 ft.  
 base,  $1\frac{1}{2}$  ft. high W. of cor.

Pits impracticable

Note: On account of natural  
 obstacles, I am unable to set post

Subdivision of T. 23 S., R. 24 E.

chain

in the ground.

Rand, mountainous  
soil, sandy and rocky or rock  
sub soil, 4<sup>th</sup> rate

No timber

Mudgy growth, short, shadscale.

Mountainous land 80.00 chs.

July 11, 1911

July 12: At 7<sup>h</sup> 05<sup>m</sup> a.m. l.m.t., I  
set off 38° 50' on the lat. arc, 22° 07'  
N., on the decl. arc, and determine  
a meridian with the solar at the  
cor. of secs. 8, 9, 16 and 17.

Hence I run

East., on random line bet. secs. 9  
and 16.

31.00

Left bank of Dolores river.

Set temporary meander cor.

To determine distance across river.

I set a flag on right bank, then  
measure a base line north, 6.00 chs.  
to a point from which flag bears  
S. 66° 55' E., from the flag the north  
end of the base bears N. 66° 55' W.,  
therefore tan. 66° 55' × base or  $2.346 \times$   
 $6 = 14.07$  chs., which added to 31.00 chs.  
makes

45.07

Right bank Dolores river.

Set temporary meander cor.

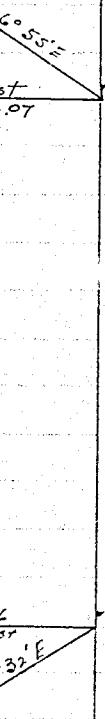
69.94

Right bank of Dolores river.

Set temporary meander cor.

To determine distance across river

I set a flag on line on left bank, then  
measure a base line south 5 chs. to  
a point from which flag bears N.  
56° 32' E., from the flag the south  
end of base bears S. 56° 32' W., therefore  
tan 56° 32' × base or  $1.517 \times 5 = 7.56$  chs.,  
which added to 69.94 chs. makes



Subdivision of T. 23 S., R. 24 E.

Chains	
77.50	To left bank Dolores river. Set temporary meander cor. Intersect the cor. of secs. 9, 10, 15 and 16. Hence I run West, on true line bet. secs. 9 and 16. Over mountainous land Descend 30 ft. to
2.46	Left bank Dolores river. Set an iron post, 3 ft. long, 1 in. in dia., 26 lbs. in a mound of stone 4 ft. base, 2 ft. high for meander cor. fract. secs. 9 and 16, marked on brass cap T 23 S R 24 E MC S 9 on N. half and S 16 on S. half, raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high E. of cor. Pits impracticable
10.02	Note: On account of natural obstacles I am unable to set post in the ground. Right bank of Dolores river. Set an iron post, 3 ft. long, 1 in. in dia., 26 lbs. in the ground for meander cor., fract. secs. 9 and 16, marked on brass cap T 23 S R 24 E S 9 on N. half and S 16 M On S. half, raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable Descend abruptly over south point of high rocky ridge
20.00	Spur, 150 ft. above river, projects S. James Marangs house bears south 12 chs. Descend abruptly over ledges and boulders.

Subdivision of T. 23 S., R. 24 E.

chain	
34.89	Base of spur, 175 ft. below top and right bank Dolores river. Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for meander cor. fract. secs. 9 and 16 marked on brass cap T 23 S R 24 E MC S 9 on N. half and S 16 on S. half, dig pit, 36 x 36 x 12 ins., E. of post, 8 ft. dist., raise a mound of earth 4 ft. base, 2 ft. high E. of cor. Point for $\frac{1}{4}$ sec. cor. falls in Dolores river., no cor. set.
39.98	Left bank Dolores river, Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for meander cor. fract. secs. 9 and 16 marked on brass cap, T 23 S R 24 E S 9 on N. half and S 16 MC on S. half, dig pit, 36 x 36 x 12 ins., W. of post 8 ft. dist., raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
48.96	Hence over rich bottom land, through scattering cottonwood timber wagon road to DeWey, Utah, bears N. and SE. Wire fence, bears N. & S.
55.00	Enter W. Edwards cultivated field.
57.20	Base of 100 ft. ledge, bears N. & S. Leave field, ascend abruptly.
68.20	Top of ledge and narrow ridge, bears N. & S.
69.20	Descend into Waring Canyon.
75.40	Waring Canyon, and wash 50 lks. wide, course N. Road from DeWey, Utah to Waring's ranch, bears N. & S.
79.96	Ascend 75 ft. to The cor. of secs. 8, 9, 16 and 17. Land, mountainous and level draining towards the Dolores river.

Subdivision of T. 23 S., R. 24 E.

chains.

Soil, rocky and rich sandy loam;  
 4<sup>th</sup> and 1<sup>st</sup> rates.  
 Timber a few cottonwoods on river bottom.  
 Undergrowth, shade scale.  
 Rich sandy loam soil on level land on river bottom; 19.24 chs.  
 Mountainous land 60.72 chs.

N. 0° 03' W., bet. secs. 8 and 9.

Over mountainous land.

Ascend 50 ft. to

6.00 Spur, projects N. 80° E.

Descend 50 ft. to

10.20 Wash, 10 lks. wide, coarse E.

Ascend abruptly over ledges and boulders on SE. face of ridge.

23.00 Top of flat ridge, 225 ft. above wash, bears NE. and SW.

Hence across ridge.

Descend abruptly from ridge.

4.000 Base of steep descent, bears NE. and SW.

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., marked on brass cap 1/4 S 8° on W. half and S 9° on E. half, raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor.

Pits impracticable.

45.80 Wash, 10 lks. wide, 2 ft. dep., coarse NW.

51.15 Left Bank of Dolores river.

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for meander cor. fract. secs., 8 and 9, marked on brass cap T 23 S R 24 E on N. half, M C S 9° on E. half and S 8° on W. half, dig pit, 36 x 36 x 12

Subdivision of T. 23 S., R. 24 E.

chains

uis, S. of post, 8 ft. dist., raise a mound of earth 4 ft. base, 2 ft. high S. of cor.

July 12: At this cor. I set off  $22^{\circ}04'$  N., on the decl. arc, and at 12<sup>h</sup> 05<sup>m</sup> p.m. l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ}50'$

To determine distance across river I set a flag on left bank, then measure a base line N.  $89^{\circ}57' E.$ , 3.00 chs. to a point from which flag bears N.  $39^{\circ}29' W.$ , from the flag the east end of base bears S.  $39^{\circ}29' E.$ , therefore tan.  $50^{\circ}34' \times$  base or  $1.216 \times 3 = 3.65$  chs., which added to 51.15 chs., makes.

54.80 To right bank Dolores river  
Set an iron post, 3 ft. long, 1 in. in dia, 26 ins. in the ground for meander cor. fract. secs. 8 and 9 marked on brass cap. T 23 S R 24 E on N. half, S 9 on E. half and M C S 8 on W. half, raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high N. of cor.  
Pits impracticable  
descend abruptly over ledges and boulders.

57.80 Top of accent and mesa, 12.5 ft. above river, bears E. & W.  
Thence over broken land.

63.80 Wash, 15 lcs. wide, 1 ft. deep, course NW.

76.50 Wash, 10 lcs. wide, 1 ft. deep, course W.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia, 24 ins. in a mound of stone, 4 ft. base, 2 ft. high for cor. of secs. 4, 5, 8 and 9,

Subdivision of T. 23 S., R. 25 E.

Chain.

marked on brass cap.

T 23 S 5 m NW,

R 24 E 3 4 m NE,

S 9 m SE. and

S 8 m SW. quadrant,

raise a mound of stone, 2 ft.  
base,  $1\frac{1}{2}$  ft. high W. of cor.

Pits impracticable

Note: On account of natural  
obstacles I am unable to set  
post in the ground.

Land, mount aneas draining  
north and west

Soil, rocky on rocky sub-soil,  
 $\frac{4}{4}$  th rate

No timber.

Undergrowth, some short shadscale

Mount aneas land 80.00 chs.

East, on random line bet. secs.

4 and 9.

Set temporary  $\frac{1}{4}$  sec. cor.

Intersect N. & S. line 3 lks. N. of  
the cor. of secs. 3, 4, 9 and 10  
Hence I run

N.  $89^{\circ} 59'$  W., on true line bet. secs.

4 and 9.

Over rolling mountain top  
draining N.

Ascend 30 ft. to

Low ridge, bears N. & S.

Descend 40 ft. to

Wash, 10 lks. wide, course N.  $30^{\circ}$  W.

Ascend 50 ft. to

Ridge, bears N. & S.

Descend 50 ft. to

Wash, 15 lks. wide, course N.

Ascend.

Low ridge, bears N. & S.

Set an iron post, 3 ft. long, 1 in.

Subdivision of T. 23 S., R. 24 E.

Chains

in dia, 26 ms. in the ground for  
 $\frac{1}{4}$  sec. cor., marked on brass cap  
 $\frac{1}{4}$  S 4' on N. half and S 9' on S. half,  
 raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high N. of cor.

Pits impracticable

52.00 Wash, 10 lks. wide, coarse N.

61.00 Descend abruptly over rocky land  
 facing W.

67.80 Base of steep descent, bears N. + S.  
 Gradually descend

80.03 275 ft. below top.

The cor. of secs. 4, 5, 8 and 9.

Land mount amoenus with a  
 general N. slope and drain.  
 Soil, rocky and gravelly on rocky  
 sub-soil; 4<sup>th</sup> rate.

No timber

Mudergrowth, some short shade-calc.  
 Mount amoenus land 80.03 chs.

July 12, 1911

July 14: For solar observation  
 see meanders left bank Dolores  
 river, sec. 16

West, bet. secs. 17 and 20.

Over broken mount amoenus land  
 draining N.

Descend 50 ft. to

2.00 Warming canyon, and wash, 60  
 lks. wide, coarse N.

Ascend 75 ft. to.

9.00 Ridge, bears N. + S.

Descend 50 ft. to

16.00 Wash, 10 lks. wide, coarse NE.  
 Ascend.

19.00 Rocky spur, projects S., at point  
 of rock bluff 75 ft. high which  
 bears NE. and NW.

Descend 150 ft. to

Subdivision of T. 23 S., R. 24 E.

chain.	
22.50	Wash, 30 eks. wide, course NE. Ascend abruptly 150 ft. to.
29.00	Ridge, bears N. + S. Descend
35.65	Wash, 15 eks. wide, course NE. Ascend
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4} S 17'$ on N. half, and $S 20'$ on S. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Post impracticable Note: On account of natural obstacles I am unable to set post in the ground.
	July 14: At this cor. I set off $21^{\circ} 47'$ N., on the decl. arc., and at 12 <sup>h</sup> . 06 <sup>m</sup> . p.m. l.m.t., observe the sun on the meridian, the resulting lat. is $38^{\circ} 49'$ .
67.50	Low ridge, bears NW + SE. Descend.
68.30	Wood road, bears NW. + SE.
76.10	Ledge, 60 ft. high, bears NW + SE. Descend abruptly
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in a mound of stone, 4 ft. base, 2 ft. high for cor. of secs. 17, 18, 19 and 20, marked on brass cap $T 23 S 18'$ in NW, $R 24 E S 17'$ in NE, $S 20'$ in SE, and $S 19'$ in SW, quadrant, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Post impracticable Note: On account of natural

Subdivision of T. 23 S., R. 24 E.

chains.

obstacles I am unable to set post in the ground.  
Land, mountainous with a general N. drain.  
Soil, sandy and rocky or rocky sub-soil, 4<sup>th</sup> rate  
No timber  
Undergrowth short shale caliche.  
Mountainous land 80.00 chs.

N. 0° 03' W., bet. secs. 17 and 18.  
Over mountainous land.

Descend 20 ft. to wash, 10 lks. wide, course SW.

Ascend abruptly  
4.50 Top of ledge 60 ft. high, bears S.E. and S.S.E. 4 chs., thence N.W. gradually ascend.

12.30 Ridge, bears E. and W.  
Descend over rocky land sloping N. to Grand river.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 lbs. in a mound of stone 4 ft. base, 2 ft. high for  $\frac{1}{4}$  sec. cor., marked on brass cap  $\frac{1}{4} S \frac{1}{8}$  on W. half and  $S \frac{1}{4}$  on E. half, raise a mound of stone, 2 ft. base,  $\frac{1}{2}$  ft. high W. of cor.  
Pits impracticable.

Note: On account of natural obstacles I am unable to set post in the ground.

43.10 Wash, 15 lks. wide, course NE.  
44.80 Wood road, bears NE. + SW.  
57.80 Wash, 20 lks. wide, 5 ft. deep, course NW.

59.80 Road from Cisco, Utah to Rio Dolores mine, bears NW. + SE.  
65.10 Same road, bears NE. + SW.  
67.40 Same road, bears NW. and SE.  
72.60 300 ft. below top of ridge on

Sub-division of T. 23 S., R. 24 E.

Chains:

Left Bank of Grand river.  
Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for meander cor. fract. secs. 17 & 18.  
Marked on brass cap T 23 S 17 E N.C.S. 8 on N. half, MC S 17 on E. half and S 18 on W. half, raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high S. of cor.

Plots impracticable

Note: The cor. of secs. 7, 8, 17 and 18 will fall in Grand river.

Rand mountaneous, with a general N. slope and drain.

Soil, rocky on rocky sub-soil; 4<sup>th</sup> rate.

Timber, a few scattering cedar and spruce.

No undergrowth.

Mountaneous land 72.60 acs.

West, on tree line bet. secs. 8 & 17  
Over mountaneous land, through short undergrowth of shadscale.

Descent rocky east face of ridge.

Top of flat ridge, 175 ft. above sec. cor., brass T 23 S.

Hence across ridge.

Began steep descent towards river.

Top of 125 ft. ledge and left bank of Grand river.

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone, 4 ft. base, 2 ft. high for meander cor. fract. secs. 8 and 17, marked on brass cap T 23 S 17 E N.C.S. 8 on N. half and S 17 on S. half, raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high E. of cor.

Plots impracticable

12.110

241.00

28.00

Subdivision of T. 23 S., R. 24 E.

chains.

Note: On account of natural obstacles I am unable to set post in the ground.

To determine distance across river I set a flag on right bank and being unable to secure a base line at this point I also erect a signal from my flag on right bank I measure a base line N. 10.00 chs., to a point where the base subtends an angle of  $66^{\circ} 32'$  to the flag. therefore tan  $66^{\circ} 32' \times$  base or  $2.303 \times 10.$   
= 23.03 chs., which added to 28.00 chs makes.

51.03 To right bank of broad river at bend from NE. to NW.  
Set an iron post, 3 ft. long, 1 in. in dia., 26 lbs. in the ground for meander cor. fract. sec. 8, marked on brass cap.

T 23 S 24 E.

S 8

NE

S 17.

from which a cottonwood, 38 in. diam., bears N.  $23\frac{1}{2}$ ° E., 120 lbs. dict, marked MC T 23 S 24 E. S 18 BT.

Point for 1/4 sec. cor. falls in river, no cor established  
Land. Mount aneroid,  
Soil, rocky on rocky sub-soil;  
1/2 rate.

No timber

Undergrowth, short shale scale.

Mount aneroid land, 28.00 chs

July 14, 1911

July 17: At 7<sup>h</sup>. 06<sup>m</sup>. a.m. l.m.t., I set off  $28^{\circ} 50'$  on the lat. arc;  
 $21^{\circ} 22' N.$ , on the decl. arc; and

Subdivision of T. 23 S., R. 24 E.

chains

determine a meridian with the solar at the cor. of secs. 4, 5, 8 and 9.

Hence I run

West, on tree line bet. secs. 5 and 8.

Gradually descend over mountainous land facing SW. to Grand river.

14.30 Marsh, 10 lks. wide, 1 ft. deep, course S.  $80^{\circ}$  W.

Hence along south edge of ledge run.

14.70 Marsh, 20 lks. wide, course NW.

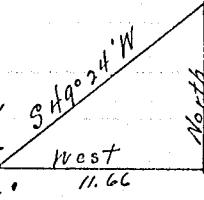
15.50 Left bank of Grand river.  
Set an iron post, 3 ft. long, 1 in. mi dia., 26 ins. in a mound of stone 4 ft. base, 2 ft. high, for meander cor. fract. secs. 5 and 8, marked on brass cap T 23 S R 24 E 71 C S 5 on N. half and S 8 on S. half, raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high E. of cor.

Pits impracticable

Note, on account of natural obstacles I am unable to set post in the ground.

To determine distance across river I set a flag on right bank, then measure a base line N. 10.00 chs. to a point from which flag bears S.  $49^{\circ} 24' W.$ , from the flag the north end of the base bears N.  $49^{\circ} 24' E.$  therefore tan  $49^{\circ} 24' \times$  base or  $1.166 \times 10.00$  chs., makes 11.66 chs., which added to 15.50 chs. makes.

To right bank of Grand river in center of road from Cisco, Utah to Castleton, Utah.



27.16

Subdivision of T. 23 S., R. 25 E.

Chains	
27.70	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for witness cor. to the meander cor. of fract. secs. 5 and 8, marked on brass cap T. 23 S., R 25 E S 5 on N. half, S 8 on S. half, with M C M C to the east, raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable Ascend abruptly over ledges.
35.00	Top of ledges and broken bench, 150 ft. above river, bears N. & S. Gradually descend
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone; 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 5 on N. half and S 8 on S. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable Note: On account of natural obstacles I am unable to set post in the ground.
41.80	Wash, 10 lks. wide, 1 ft. deep, course N. $20^\circ$ W. Ascend 30 ft. to
43.00	Spur, projects N. Descend 75 ft. to
49.75	Wash, 15 lks. wide, 2 ft. deep, course NE.
54.60	Wash, 10 lks. wide, $1\frac{1}{2}$ ft. deep. course NE.
60.00	Wash, 10 lks. wide, 2 ft. deep. course NE.
63.60	Wash, 15 lks. wide, 1 ft. deep, course NE. Gradually ascend.
75.30	Wood road, bears NE. and SW.

Subdivision of, T. 23 S., R. 24 E.

chains.

76.00	Low ridge, bears N. & S. descend
80.00	Set an iron post, 3 ft. long, 2 in. in dia., 24 in. in the ground for cor. of secos. 5, 6, 7 and 8, marked on brass cap  T 23 S. 5' m NW, (R 24 E S 5' m NE, S 8' m SE and S 7' m SW. quadrant, raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor. Pits impracticable Land mountinous with general W. and E. drains to Grand river. Soil, rocky on rocky sub-soil; 4 <sup>th</sup> rate. No timber Undergrowth, short shadscale. Mountinous land, 8000 ft.
8.00	S. 0° 03' E., on true line betw. secos. 7 and 8 Gradually ascend over mountainous land, through short under-growth of shadscale.
2.50	Ridge road, bears NE. and W.
4.80	Ridge, 50 ft. above sec. cor., bears E. & W.
	Descend abruptly over ledges and boulders.
10.90	Wash in canyon, 15 lks. wide, 120 ft. below ridge, course SE.
	Ascend 50 ft. to
18.50	Spur, projects E. descend abruptly.
32.80	Wash, 10 lks. wide, 220 ft. below spur, course S. 80° E. Thence over land facing E.
34.70	Wash, 15 lks. wide, 2 ft. deep, course

8.00	S. 0° 03' E., on true line betw. secos. 7 and 8 Gradually ascend over mountainous land, through short under-growth of shadscale.
2.50	Ridge road, bears NE. and W.
4.80	Ridge, 50 ft. above sec. cor., bears E. & W.
	Descend abruptly over ledges and boulders.
10.90	Wash in canyon, 15 lks. wide, 120 ft. below ridge, course SE.
	Ascend 50 ft. to
18.50	Spur, projects E. descend abruptly.
32.80	Wash, 10 lks. wide, 220 ft. below spur, course S. 80° E. Thence over land facing E.
34.70	Wash, 15 lks. wide, 2 ft. deep, course

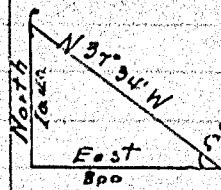
Subdivision of T. 23 S., R. 21 E.

Chains.	
	E.
	Ascend over east end of spur.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{2} S 7$ on W. half and $S 8$ on E. half, raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
	Pits impracticable.
44.00	Ledge, 40 ft. high bears NE. and SW.
	Descend.
47.00	Mash in canyon, 25 lks. wide, 3 ft. deep, course S. $30^{\circ}$ W.
58.50	Road from Cisco, Utah to Castleton Utah, bears NE. 1 ch., thence E. and SW.
62.50	Wire fence, bears NE. and SW. Enter rich bottom land.
66.00	Enter cottonwood timber, bears E. and W.
76.30	Wire fence, bears S. $80^{\circ}$ E., and N. $80^{\circ}$ W., 5 ch., thence N. and NE.
76.96	Right bank of Grand river. Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for meander cor. fract. secs. 7 and 8, marked on brass cap T 23 S R 24 E on N. half, $S 8$ on E. half and MC S 7 on W. half, from which a cottonwood, 5 ins. diam., bears N. $36\frac{1}{4}$ W., 39 lks. dist., marked MC T 23 S R 24 E S 7 BT
	a cottonwood, 6 ins. diam., bears N. $64\frac{1}{4}$ E., 52 lks. dist., marked MC T 23 S R 24 E S 8 BT.
	To determine the distance across Grand river to the meander cor. of fract. secs. 17 and 18 which bears South, Erect a signal at this point.

Subdivision of T. 23 S., R. 24 E.

chains.

and from the meander cor. of fract. secs. 17 and 18 measure a base line East, 8 chs., to a point from which flag bears N.  $37^{\circ}34'W$ . The base subtends an angle of  $52^{\circ}26'$  to the flag, therefore tan  $52^{\circ}26'$   $\times$  base or  $1.300 \times 8 = 10.40$  chs. the distance across Grand river between the meander cor. of fract. secs. 17 and 18 and the meander cor. of fract. secs. 7 and 8.



Gent. mountainous and level.  
Soil, rocky and sandy loam;  $1^{st}$  and  $2^{nd}$  rates.

Timber, Cottonwood  
Undergrowth, Shadscale.

N. 58.50 chs. mountainous land with general south drain. rocky soil on rocky sub-soil;  $1^{st}$  rate.

S. 18.46 chs. rich bottom land along Grand river. Soil, rich sandy loam with a deep sand sub-soil;  $1^{st}$  rate  
Timber, cottonwoods on S. 10.96 chs.  
Mountainous land on 58.50 chs.

July 15: At 8<sup>h</sup>. 06<sup>m</sup>. a.m. I. m. I., I set off  $38^{\circ}19'$  on the lat. arc;  $21^{\circ}10'N.$ , on the decl. arc, and determine a meridian with the solar at the cor. of secs. 17, 18, 19 and 20.

Hence I run

West, bet. secs. 18 and 19.

Over mountainous land, through short undergrowth of shadscale.

1.40 Wash, 10 lcs. wide, course SW.

Hence over land facing S.

8.00 Wash, 20 lcs. wide, 3 ft. dep.  
course  $71.60^{\circ}W$ .

Hence across hollow.

Leave hollow, enter scattering

27.00

Subdivision of T. 23 S., R. 24 E.

Chain.	
	cedar and piñon, bears NW. and SE.
	Ascend abruptly.
36.70	Lop of rocky ridge, 200 ft. above base, bears NW. and SE.
	Descend abruptly.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 in. in a mound of stone 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4} S^{\circ} 18'$ on N. half and $S^{\circ} 19'$ on S. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Post impracticable.
	Note: On account of natural obstacles I am unable to set post in the ground.
52.70	Bottom of canyon and wash, 30 hrs. wide, 220 ft. deep, course NW.
	Ascend abruptly over ledges.
59.80	Rocky spur, 125 ft. high, projects N.
	Descend over rocky land facing NW. to Grand river
78.10	Left bank of Grand river, course SW.
	Set an iron post, 3 ft. long, 1 in. dia., 26 in. in a mound of stone 4 ft. base, 2 ft. high for meander cor. fract. sec. 18 and 19, marked on brass cap T 23 S R 24 E M C S 18 on N. half and $S^{\circ} 19'$ on S. half, raise a mound of stone, 2 ft. base $1\frac{1}{2}$ ft. high E. of cor. Post impracticable.
	Note: On account of natural obstacles I am unable to set post in the ground.
	Cor. situated on edge of road from Cisco, Utah to Castleton Utah, bears NW. SW. Land, mountainous with a general

Subdivision of T. 23 S., R. 24 E.

Chains

New drain.  
Soil, rocky on rocky sub-soil, 4<sup>th</sup> rate.

Timber, some cedar and pinon.  
Undergrowth, sagebrush.

Mountainous land 78.10 chs.

May 15: At this meander cor., I set off 21° 39' N., on the decl. arc; and at 12° 06' P.M. l.m.t., observe the sun on the meridian; the resulting latitude is 38° 48'

July 17: For solar observation see line bet. secs. 5 and 8.

From the cor. of secs. 7, 12, 13 and 18 on the W. bdy of the tp., which is a sandstone 24 x 15 x 7 ins., set in a mound of stone, and marked and witnessed as described by the Surveyor General

True

East, on tree line bet. secs. 7 and 18

over stony land sloping S.

1.00 Wash, 10 lks. wide, 1 ft. deep, course S.

14.23 Right bank of Grand river.  
Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for meander cor. fract. secs. 7 and 18.  
marked on brass cap T 23 S R 24 E S 7  
on N. half and S 18 M C on S.  
half, raise a mound of stones, 2 ft. base, 1/2 ft. high W. of cor.  
This impracticable

Paud, hilly, draining S.

Soil, stony on gravelly sub-soil;  
3<sup>rd</sup> rate

No timber

No Undergrowth

Bk. 392  
Subdivision of T. 23 S., R. 24 E.

Chamis

July 17: Sky overcast at noon,  
observations for latitude impossible

West, on random line, bet. secs.  
6 & 7

40.00 Set temporary  $\frac{1}{4}$  sec. cor.  
82.00 Intersect W. Body of the tp. 7 lks. N.  
of the cor. of secs. 1, 6, 7 and 12  
which is a sandstone,  $27 \times 16 \times 11$   
in., above ground, firmly set and  
marked and witnessed as described  
by the Surveyor General  
There I run

$7.89^{\circ} 57' E.$ , on true line bet. secs. 6  
and 7.

Gradually descend over broken land  
sloping NE., through scattering forest  
of cedar and pinon and undergrowth  
of shadscale

34.00 Leave cedar and pinon, bears NE.  
and SW.

37.70 Wash, 10 lks. wide, 1 ft. deep, course  
NE.

42.00 Set an iron post, 3 ft. long, 1 in. in  
dia., 26 in. in the ground for  $\frac{1}{4}$  sec.  
cor., marked on brass cap  $\frac{1}{4} S 6'$   
on N. half and  $S 7'$  on S. half,  
raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high N. of cor.

Pits impracticable

43.30 Wash, 10 lks. wide, 2 ft. dep,  
course NE.

82.00 The cor. of secs. 5, 6, 7 and 8.  
Land, rolling.

Soil, rocky on rocky sub-soil, 4<sup>th</sup> rate  
timber, cedar and pinon on W. 3<sup>rd</sup> cho.  
Undergrowth, shadscale

July 17-1911

Meanders, T. 23 S., R. 24 E.

Meanders of right bank of Dolores river, down stream.

I commence at the meander cor. of fract. secs. 13 & 18, 57.80 chs. South of the cor. of secs. 7, 12, 13 & 18. heretofore described.

July 8: For solar observation see meanders left bank of Dolores river sec. 13.

Hence I run with meanders in sec. 13.  
N.  $43^{\circ} 45' W.$ , 5.10 chs. To edge of ledge, 40 ft. high

N.  $27^{\circ} 45' W.$ , 8.00 chs. Descend from ledge, enter dense willow undergrowth

N.  $33^{\circ} W.$ , 10.00 chs,  
N.  $47^{\circ} 30' E.$ , 8.50 chs,  
N.  $54^{\circ} 17' E.$ , 7.89 chs, to meander cor  
fract. secs. 13 & 18,  
28.15 chs. south of  
cor. of secs. 7, 12, 13  
18

Land, broken and level.

Soil, sandy loam and rocky; 1<sup>st</sup> and 4<sup>th</sup> rates

No timber

Undergrowth willow.

Hence in sec. 13 from meander cor  
fract. secs. 13 & 18, 1.75 chs. south of the  
cor. of secs. 7, 12, 13 & 18.

Bare rocky bank.

N.  $73^{\circ} 02' W.$ , 6.01 chs. to meander cor  
fract. secs. 12 & 13.

Land, level.

Soil, rocky; 4<sup>th</sup> rate.

No timber

No Undergrowth.

July 8, 1911

July 13: At 7<sup>th</sup> 05<sup>m</sup>. a.m. l.m.t., I

Meanders, T. 23 S., R. 34 E.

Chamis.

set off  $38^{\circ} 50'$  on the lat. arc.,  $21^{\circ} 58'$  N., on the decl. arc; and determine a meridian with the solar at the meander cor. of fract. secs. 9 & 10. Hence I run with meanders in sec 9.

Over rocky bank, through scattering willow undergrowth.  
 $S. 85^{\circ} 15' W.$ , 11.90 chs.

$S. 61^{\circ} 30' W.$ , 6.00 chs.,

$S. 23^{\circ} 00' W.$ , 10.50 chs.,

$S. 10^{\circ} E.$ , 14.80 chs.,

$S. 25^{\circ} 30' E.$ , 3.50 chs., to meander cor.

of fract. secs. 9 & 16,  
 10.02 chs. W. of the cor.  
 of secs. 9, 10, 15 & 16.

Land, level.

Soil; rocky; 4<sup>th</sup> rate

No timber

Undergrowth, willow

Hence in sec. 16.

Through dense willow undergrowth.

$S. 24^{\circ} 58' E.$ , 23.69 chs. to meander cor.

fract. sec. 16, 58.61 chs.

$71.0^{\circ} 02' W.$ , of the cor.

of secs. 15, 16, 21 & 22.

Hence I continue in sec. 16.

$S. 13^{\circ} 30' W.$ , 1.00 chs.,

$S. 60^{\circ} W.$ , 5.20 chs.,

$S. 34^{\circ} W.$ , 13.70 chs.; Enter cottonwood

timber, bears N.

$S. 65^{\circ} W.$ , 7.50 chs.,

$S. 85^{\circ} 30' W.$ , 7.50 chs.,

$N. 77^{\circ} 30' W.$ , 10.90 chs., at 9.00 chs., wire fence  
 bears N.

$N. 75^{\circ} 30' W.$ , 8.60 chs.,

$N. 78^{\circ} 45' W.$ , 12.60 chs.,

$N. 24^{\circ} 15' W.$ , 11.40 chs.,

$N. 24^{\circ} 45' E.$ , 4.00 chs.,

Meanders, T. 23 S., R. 21 E.

- N.  $170^{\circ}$  E., 5.50 chs.,  
N.  $43^{\circ}$  E., 14.30 chs.,  
N.  $57^{\circ} 30' E.$ , 20.00 chs., At 5.00 chs. wagon  
road, brace SE. and  
ford across river.  
N.  $67^{\circ} 15' E.$ , 2.40 chs., to meander cor.  
frac. sec. 9 + 16, 54.89  
chs. Lt. of the cor. of sec.  
9, 10, 15 + 16.

Land, level.

Soil, sandy loam; 1<sup>st</sup> rate  
timber, Cottonwood  
Meadow growth, willow.

Plane in sec. 9.

Through dense brush.

North, 1.25 chs.

N.  $15^{\circ} 30' W.$ , 4.80 chs.

North .. 16.50 chs.,

N.  $172^{\circ} 30' W.$ , 11.70 chs.

N.  $53^{\circ} W.$ , 10.00 chs.,

N.  $76^{\circ} 45' W.$ , 6.60 chs.,

N.  $83^{\circ} 30' W.$ , 4.00 chs.,

S.  $73^{\circ} 15' W.$ , 4.60 chs., to meander cor.  
frac. sec. 8 sandy.

Land, level.

Soil, rocky; 1<sup>st</sup> rate  
timber, a few cottonwoods  
Meadow growth, willow.

July 13: At this meander cor., I set  
off  $21^{\circ} 56' N.$ , on the decl. arc;  
died at  $12^{\text{h}} 05^{\text{m}}$  p.m. l.m. I  
observe the sun on the meridian;  
the resulting lat. is  $38^{\circ} 58'$ .

Meanders, T. 23 S., R. 24 E.

Meanders left bank of Dolores river,  
up, stream.

I commence at the meander cor. of  
frac. secs. 8 and 9, heretofore described  
July 13: For solar observation see meander  
right bank of sec. 9.

Hence I run with meanders in sec.  
9.

Through dense willow undergrowth

S.  $86^{\circ}$  E.; 9.90 chs.,

S.  $52^{\circ} 15' E.$ , 12.00 chs., at 7.95 chs. wash, 20  
lks. wide, course NE.

At 7.70 chs., wash, 20  
lks. wide, course NW.

S.  $29^{\circ} 15' E.$ , 7.00 chs.,

S.  $1^{\circ} 45' E.$ , 2.40 chs.,

S.  $2^{\circ} 15' W.$ , 8.00 chs.,

S.  $16^{\circ} 15' E.$ , 5.10 chs.; At 1.00 chs. mouth of  
Warming Canyon wash,  
1ch. wide course NE.  
D. Edwards house  
bears S.  $30^{\circ} E.$

S.  $45^{\circ} E.$ , 17.00 chs. across rich bottom  
land.

D. Edwards house  
bears N.  $66^{\circ} W.$

S.  $35^{\circ} 30' E.$ , 6.60 chs.,

S.  $63^{\circ} 30' W.$ , 9.50 chs., to meander cor.  
frac. secs. 9 and  
16.

Land level.

Soil, rocky and sandy loam; 4<sup>th</sup>  
and 1<sup>st</sup> rates.

Timber, a few cottonwoods  
Undergrowth, willow.

July 13, 1911

July 14: At 7<sup>th</sup> 06<sup>m</sup> a.m. I m.t., I set  
off  $38^{\circ} 49'$  on the lat. arc.,  $21^{\circ} 50' N.$ ,  
on the decl. arc., and determine a  
meridian with the solar at the

Meanders, T. 23 S., R. 24 E.

Meander cor. of fract. secs. 9 and 16,  
1/8.96 chs. West of the cor. of secs. 9,  
10, 15 and 16.

Hence I run with meanders in  
sec. 16.

S.  $50^{\circ}$  W., 16.50 chs. At 5.00 chs. wagon road  
to Mevey, Utah bears  
NW, and ford across  
river, bears SE.  
At 10.00 chs., wire fence  
bears NW.

S.  $22^{\circ}30'$  W., 8.50 chs.

S.  $10^{\circ}$  W., 5.50 chs. Hence along base of  
sandstone ledge.

S.  $35^{\circ}$  E., 12.50 chs. At 12.50 chs. ledge  
turns S.  $57^{\circ}$  E.

S.  $72^{\circ}$  E., 10.50 chs.

S.  $81^{\circ}$  E., 8.00 chs.

S.  $75^{\circ}30'$  E., 10.00 chs.

S.  $82^{\circ}$  E., 9.00 chs. At 3.40 chs. mouth  
of Hospital Canyon  
wash, 25 lks. wide  
course N.

N.  $86^{\circ}$  E., 6.00 chs.

N.  $54^{\circ}45'E.$ , 9.00 chs.

N.  $29^{\circ}$  E., 8.20 chs.

N.  $56^{\circ}$  E., 7.10 chs. Ascend over  
ledge.  
To meander cor.  
of fract. secs. 15  
and 16.

Land, level.

Soil, sandy loam and rocky; 1st.  
and 4th. rates.

No timber

Undergrowth, some willow.

Hence in sec. 16 from meander  
cor. 11.50 chs. S.  $0^{\circ}02'E.$  of the cor. of  
secs. 9, 10, 15 and 16.

Along top of sandstone ledge.

## Meanders, T 23 S., R. 24 E.

N.  $79^{\circ}$  W. 5.10 chs. to meander cor. of fract. secs. 9 and 10.  
2.46 chs. W. of the cor. of secs. 9, 10, 15 and 16.

Land, level.

Soil, rocky; 1st. rate.

No timber.

No Undergrowth.

Hence in sec. 9.

Over rocky bank.

N.  $35\frac{1}{4}^{\circ}$  W., 5.90 chs. Wash, 10 lks. wide, coarse S. Enter willow undergrowth and sandy bank.

N.  $67\frac{1}{4}^{\circ}$  W., 2.30 chs.

N.  $31\frac{1}{2}^{\circ}$  W., 15.30 chs.

N.  $21\frac{1}{2}^{\circ}$  E. 4.50 chs.

N.  $59^{\circ}$  E., 3.10 chs.

S.  $84^{\circ} 45' E.$ , 1.60 chs. to meander cor. of fract. secs. 9 and 10.

Land, level.

Soil, sandy loam and rocky; 1st. and 4th. rates.

No timber

Undergrowth, willow.

July 14, 1911

July 8: at 8<sup>h</sup>. 05<sup>m</sup>. a.m. I. m. I, I set off  $38^{\circ} 49\frac{1}{4}'$  on the lat. arc;  $22^{\circ} 35' N.$  on the decl. arc; and determine a meridian with the solar at the meander cor. of fract. secs. 13 and 18. Hence I run with meanders in sec. 13.

Along rocky bank.

S.  $69^{\circ}$  E. 12.50 chs. Enter sandy bank and high greasewood undergrowth.

S.  $59^{\circ} 09'$  E. 6.91 chs. To meander cor. of

Meanders, T. 23 S., R. 24 E.

frac. secs. 13 and 18, 8.21 chs. South  
of the cor. of secs. 7, 17, 13 and 18.  
Land, level.

Soil, rocky and sandy loam; 4 th.  
and 1 st. rates.

No timber.

Undergrowth, greasewood.

Hence in secs. 13 from Meander  
Cor. 21.95 chs. S. of cor. of secs. 7, 12,  
13 and 18.

Over level rocky bank through  
scattering greasewood undergrowth.

S.  $38^{\circ} W.$ , 4.30 chs..

S.  $49^{\circ} W.$ , 16.40 chs.,

S.  $26^{\circ} W.$ , 5.00 chs.,

S.  $35^{\circ} E.$ , 20.90 chs., at 1 p. 00 ch Wash, 50 ft. wide drains NE.

S.  $16^{\circ} E.$ , 18.90 chs., to meander cor.  
of frac. secs. 13 and  
18.

Land, level.

Soil, rocky; 4 th. rate.

No timber.

Undergrowth, some willow.

July 8: At this meander cor. I set  
off  $22^{\circ} 34' N.$  on the decl. arc; and  
at  $12^h 05^m$ . P.m. l.m.t. observe the  
Sun on the meridian; the result-  
ing lat. is  $38^{\circ} 48\frac{1}{2}'$ .

Meanders of the left bank of Grand  
river, down stream.

I commence at the meander cor.  
of frac. secs. 5 and 8 heretofore  
described.

July 18: at  $7^h 06^m$ . a.m. l.m.t., I  
set off  $38^{\circ} 50'$  on the lat. arc;  $21^{\circ}$   
 $12' N.$ , on the decl. arc; and deter-  
mine a meridian with the solar.  
Hence I run with meanders in  
sec. 8.

Meanders. T. 23 S., R. 24 E.

Over rocky bank.

S.  $20^{\circ} 30' E.$ , 10.10 chs.

S.  $14^{\circ} 15' E.$ , 17.10 chs., to mouth of Dolores river. Enter dense brush. Hence up right bank of Dolores river.

S.  $70^{\circ} E.$ , 1.70 chs.

N.  $75^{\circ} 30' E.$ , 9.43 chs., to meander cor. of fract. secs. 8 and 9.

Land, level.

Soil, rocky; 4th. rate.

No timber.

Undergrowth, willow.

Hence in sec. 8, on left bank of Dolores river, from meander cor. fract. secs. 8 and 9, 51.15 chs., N.  $0^{\circ} 03' W.$

of the cor. of secs. 8, 9, 16 and 17. Through dense willow brush.

S.  $55^{\circ} W.$ , 10.50 chs.: At 5.00 chs., wash, 10 lks. wide, coarse NW.

Mouth of Dolores, thence down stream on left bank of Grand river.

S.  $23^{\circ} 02' W.$ , 119.36 chs.: At 15.00 chs., begin steep ascent over sandstone ledges. To meander cor. fract. secs. 8 and 17.

Land, mountainous and level.

Soil, rocky and sandy loam; 4th and 1st. rate.

No timber.

Undergrowth, some willow.

July 18: For solar observation see line bet. secs. 18 and 19.

Hence in sec. 17.

Descend over ledges.

S.  $65^{\circ} 30' W.$ , 22.00 chs. to base of ledge near SE. at point of high ridge.

N.  $89^{\circ} 00' W.$ , 31.50 chs. to meander cor. fract. secs. 17 and 18.

Meanders, T. 23 S., R. 24 E.

Land, mountainous and level.  
Soil, rocky; thin. rate.  
No timber.  
No Undergrowth.

Hence in sec. 18.

N.  $76^{\circ} 45'$  W. 10.80 chs. At .50 chs., wash, 50 lks.

wide, course N.

S.  $81^{\circ} 30'$  W. 5.50 chs. to ferry across Grand  
river and forks of road  
from Cisco, Utah, Bear-Los.  
to Castleton, Utah and E  
to Rio Dolores mine.

N.  $79^{\circ}$  W. 8.70 chs. New school house  
bears S. 6.00 chs.

S.  $89^{\circ} 15'$  W., 10.10 chs. At 2.40 chs., N.E. cor. of  
R.D. West Woods field bears  
S. 8 chs and W.

At 2.60 chs. West Woods  
pumping plant on line  
Hence parallel to fence  
and along N. edge of field

N.  $86^{\circ} 45'$  W., 8.00 chs.

S.  $86^{\circ} 45'$  W., 14.30 chs. At 8.60 chs. west end  
of West Woods field bears  
S. 5.00 chs.

S.  $69^{\circ} 45'$  W., 6.70 chs.

S.  $67^{\circ}$  W. 8.00 chs.

S.  $55^{\circ} 15'$  W., 4.00 chs.

S.  $38^{\circ} 15'$  W., 6.60 chs. Sharp bend in river.

S.  $1^{\circ} 15'$  E., 3.50 chs.

S.  $42^{\circ}$  E. 4.20 chs.

S.  $22^{\circ} 15'$  E., 15.40 chs. Point on edge of road  
to Castleton, Utah.

S.  $10^{\circ}$  E. 26.50 chs. At 16.70 chs. wash, 15 lks  
wide, course W.

At 23. chs. wash at mouth  
of canyon, 1ch. wide, course NW.  
Dragon road and bridge  
over wash, bears E. 50 chs.

S.  $14^{\circ} 45'$  W., 8.70 chs.

BK. 392 Meanders, T. 23 S., R. 24 E.

S.  $36^{\circ}$  W., 14.50 chs.

S.  $68^{\circ}$  W., 7.00 chs.

S.  $66^{\circ} 30'$  W., 200 chs. to meander cor. of fract.  
secs. 18 and 19.

Land, level.

Soil, stony and gravelly; 3rd. rate.

No timber.

Undergrowth, some willow.

July 15, 1911.

Meadows of the right bank of  
Grand River, up stream.

I commence at the meander cor. of  
fract. secs. 13 and 18 on the W. bdy. of the  
tp. which is a sandstone,  $10 \times 10 \times 8$  ins.  
above ground, firmly set. and marked  
and witnessed as described by the  
Surveyor General.

July 17: For solar observation see line  
bet. secs. 5 and 8.

Hence I run with meanders in sec. 18  
through dense willow undergrowth.

N.  $55^{\circ} 45'$  E., 7.00 chs.

N.  $14^{\circ}$  E., 11.00 chs.

N.  $17^{\circ}$  W., 21.00 chs.

N.  $15^{\circ}$  W., 7.00 chs. Base of high ledge.

Hence along ledge.

N.  $1^{\circ}$  W., 9.50 chs. Ledge turns W.

N.  $18^{\circ}$  E., 9.00 chs.

N.  $46^{\circ} 57'$  E., 14.77 chs. At 200 chs. wash, 15 ft.

wide, coarse S. To

meander cor. fract. secs.  
7 and 18.

Land, level.

Soil, sandy loam and rocky; 1st. and  
4th. rates.

No timber.

Undergrowth, willow.

Hence in sec. 7.

Over stony bank.

N.  $80^{\circ} 45'$  E. 2.00 chs.

Meanders, T. 23 S., R. 24 E.

N.  $80^{\circ}$  E., 8.00 chs.

N.  $73^{\circ} 30'$  E., 6.50 chs. At 4.30 wash, 15 lks.  
wide, coarse S.

S.  $89^{\circ}$  E. 25.50 chs. At 7.25 chs. wash, 25  
lks. wide, coarse S.  
At 15.70 chs. wash. 15 lks.  
wide, coarse S.

N.  $82^{\circ} 45'$  E. 8.00 chs.

S.  $82^{\circ} 30'$  E. 16.80 chs. At 1.00 ch., wash, 50  
lks. wide, coarse S

At 4.80 chs. Ferry across:  
Grand river, and road to  
Cisco, Utah bears N.  $60^{\circ}$  E.

P. D. West Woods House  
Bears NE. 6.00 chs.

N.  $62^{\circ}$  E. 2.30 chs. To meander cor. of  
frac. secs. 7 and 8.  
Land, level.

Soil, stony, 3rd. rate.

Timber, a few cottonwoods.

Undergrowth, some willow.

July 17, 1911

July 18: For solar observation see  
meanders left bank Grand river sec. 8.  
Hence in sec. 8.

Through dense willow undergrowth.

S.  $83^{\circ} 30'$  E., 17.60 chs.

S.  $86^{\circ} 15'$  E., 11.40 chs., To meander cor.  
frac. sec. 8.

N.  $89^{\circ}$  E., 14.00 chs.

N.  $69^{\circ}$  E., 8.00 chs.

N.  $58^{\circ} 30'$  E., 7.40 chs.

N.  $30^{\circ} 30'$  E., 5.40 chs.

N.  $22^{\circ} 30'$  E. 8.00 chs., At 4.00 chs. F. D. Hatch's  
Jumping Plant, bears E. 15 lks.

N.  $31^{\circ} 30'$  E., 12.00 chs.

N.  $15^{\circ} 45'$  E., 6.60 chs.

N.  $10^{\circ} 45'$  W., 4.00 chs. At 35 lks. wire fence  
bears W.

N.  $4^{\circ} 30'$  W., 17.20 chs. At 2.50 chs. F. Hatch's

BR. 332  
Meanders, T. 23 S., R. 24 E.

House bears W. 3 chs.

N. 8° 15' W., 4.00 chs. At 1.20 chs. wire fence bears W.

To point on edge of wagon road from Cisco, Utah to Castleon Utah.

N. 11° 30' W., 11.40 chs.

N. 23° 30' W. 8.00 chs. To true cor. point of meander cor. of fract. secs. 5 and 8.

Land, level.

Soil, sandy loam and stony; 1st. and 3rd. rates.

Timber, a few cottonwoods.

Undergrowth, willow.

July 18, 1911

General Description.

The portion of this township surveyed under this assignment for the purpose of obtaining the agricultural land along the Dolores and Grand rivers, consists chiefly of mountainous land with rich fertile bottom lands along the rivers. The soil of the mountainous part is practically all rocky and can be classed as 4th. rates. The soil of the remaining part or on the bottom lands is generally a rich sandy loam and has a deep subsoil of rich sand, which can be classed as 1<sup>st</sup>. rates.

The mountainous portion which has a general N. slope and drain on the S. side of the rivers and S. drain on the North side, is in most places covered with a scrub cedar and penon timber of no

## General Description.

commercial value, and also with a short undergrowth of shadscale, while on the bottom lands along the rivers some cottonwood timber and dense willow undergrowth is found.

The township is well watered by the Molores river which flows through secs. 8, 9, 10, 11, 12, 13 and 16 in a westerly direction and also by the Grand river which flows through secs. 7, 8, 17 and 18 in a south westerly course.

The SE. $\frac{1}{4}$  of sec. 13 contains about 80 acres of rich agricultural land which may be cultivated if watered. The water may be secured from the Molores river.

In most cases where land is cultivated along the rivers, pumps are used to raise the water to the land.

James Waring's land, which is situated in the NE. $\frac{1}{4}$  of sec. 16 contains about 120 acres of rich agricultural land but only approximately 10 acres have been cultivated. The improvements amount to about \$1000.

D. Edwards place in the SW. $\frac{1}{4}$  of sec. 9 and the NW. $\frac{1}{4}$  of sec. 16, contains about 60 acres of agricultural land. About 30 acres are now under cultivation and producing crops.

The improvements amount to about \$2000.

F. Halcro's place in sec. 8 contains about 160 acres but only about 50 acres are under cultivation. The improvements on this place amount to about \$4500.

R. D. Westwoods place in sec. 18 along the Grand river contains about 15 acres of agricultural lands and all is

General Description.

under cultivation. His residence is in the SE.  $\frac{1}{4}$  of sec. 7. In the S.  $\frac{1}{4}$  of sec. 7 there is a gravelly bench containing about 80 acres. The soil is gravelly and sandy on hard dry sand sub-soil, and would be very fertile if watered. This land would be adapted to fruit. There are no indications of mineral in the tp. No other settlers live in the tp. Neway school house, a district school is situated in sec. 18.

Howard W. Miller  
U. S. Transit man.



# FINAL OATH OF UNITED STATES SURVEYOR.

I, \_\_\_\_\_, U.S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for bearing date of the \_\_\_\_\_ day of \_\_\_\_\_, 191\_\_\_\_\_, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of \_\_\_\_\_

For final oath of Transitman see book "G" T. 24 S., R. 16 E.

of the \_\_\_\_\_ Meridian, in the State of \_\_\_\_\_, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for \_\_\_\_\_ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said \_\_\_\_\_, and sworn to before me }  
this \_\_\_\_\_ day of \_\_\_\_\_, 191\_\_\_\_\_ }



## APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 14, 1914.

The foregoing field notes of the survey of the Subdivision and Meander lines of Township No. 33 South, Range No. 24 East of the Salt Lake Base and Meridian, Utah

executed by Howard W. Miller

under his special instructions dated March 27,

having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

A large, cursive signature of Thomas Hull, followed by the title "U. S. Surveyor General".

I certify that the foregoing transcript of the field notes of the above-described surveys in \_\_\_\_\_, has been correctly copied from the original notes on file in this office.

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Obs.MFY.  
Ex. GN.

Filed April 12, 1912.

WSH.

4-679

Book "F"

# FIELD NOTES

OF THE SURVEY OF THE

EAST AND SOUTH BOUNDARIES,

RETRACEMENT AND RESURVEY OF WEST BOUNDARY,

AND

RETRACEMENT OF NORTH BOUNDARY

OF

TOWNSHIP 24 SOUTH, RANGE 16 EAST

Of the SALT LAKE BASE AND Meridian,

In the State of UTAH

EXECUTED BY

HOWARD W. MILLER

In the capacity of U. S. Surveyor, under instructions dated March 27, 1911,  
issued by the United States Surveyor General to govern surveys included in  
Group No. 11, which were approved by the Commissioner of the General Land  
Office, April 20, 1911, pursuant to authority contained in the Act of  
Congress dated , 1911.

Survey commenced September 24, 1911

Survey completed October 3, 1911.

Retr. 7-18-92 ✓ E. 6-11-80 ✓  
" 3-39-08 ✓ S. " 6-11-79 ✓  
Plan " 2-40-87 ✓

6-151

# INDEX DIAGRAM.

Township ..... 24. South..... Range ..... 16. East.....

	12	10	9	6	5	2	
14	6	8	4	3	2	1	26
16							
18	7	8	9	10	11	12	28
17	18	17	16	15	14	13	29
19	19	20	21	22	23	24	31
21	30	29	28	27	26	25	35
23	31	32	33	34	35	36	35
	38	40	41	43	44	45	

Retracement of the North boundary of T. 24 S., R. 16 E.

chain.

Survey commenced September 24, 1911 and executed with a W. & L. E. Gunley solar compass No. 1043. For description and test of instrument see book "A" of this survey. I examine the adjustments of the compass and correct the level and collimation errors, then, to test the solar apparatus by comparing its indications resulting from solar observations, made during A.m. and P.m. hours with a meridian established by observations made on Polaris, I proceed as follows:

I begin at the cor. of Ts. 23-24 S., R. 16 + 17 E., which is a sandstone 12 x 10 x 6 ins. above ground, firmly set and marked and witnessed as described by the Surveyor General. At this cor., latitude  $38^{\circ} 46' 02''$  N., longitude  $110^{\circ} 07' 22''$  W., I set off  $38^{\circ} 46'$  on the lat. arc;  $0^{\circ} 17' 5''$ , on the decl. arc; and at  $11^{\text{h}} 22^{\text{m}} 47\text{.m.}$  l.m.t., determine with the solar a meridian, and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor. At  $4^{\text{h}} 22^{\text{m}}$  p.m., by my watch which carries correct l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual of Instructions and mark a point in the line thus determined on a peg, driven firmly in the ground, 5 chs. N. of my station.

September 24, 1911

September 25: At  $7^{\text{h}} 37^{\text{m}}$  a.m. l.m.t.

Bk. 352

Retracement of the N. bdy. of T. 24 S., R. 16 E.

Chains

I lay off the azimuth of Polaris  $1^{\circ} 30'$  to the W., and mark the meridian thus determined, by cutting a small groove in the stone set September 24, on which the meridian falls 0.4 mts. east of the mark determined by the solar.

At 7<sup>h</sup>. 52<sup>m</sup>. a.m. l.m.t., I set off  $38^{\circ} 46'$  on the lat. arc,  $0^{\circ} 33' S.$ , on the decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone already set, 5 chs. N. of my station; this mark falls 0.3 mts. east of the meridian established by the Polaris Observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridians, respectively about  $0' 21''$  west and  $0' 16''$  east of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8<sup>h</sup>. l.m.t., is N.  $15^{\circ} 15' W.$ , the angle thus determined gives the magnetic decl.  $15^{\circ} 15' E.$ .

The marks on the cor. of Ts. 23 and 24 S., R. 16 & 17 E., being very dim and nearly obliterated, I destroy all traces of the old cor., and reestablish it at the same point as follows:

Set an iron post, 3 ft. long, 3 mts. in dia., 24 mts. in the ground, for cor. of Ts. 23 and 24 S., R. 16 and 17 E., marked on brass cap

5

Retracement of the N. bdy. of T. 24 S., R. 16 E.

Chain.	T 23 S on N. half, T 24 S on S. half, R 16 E S 36 in NW, R 17 E S 31 in NE, R 17 E S 6 in SE, and R 16 E S 1 in SW. quadrant, raise a mound of stone, 2 ft. base, 1½ ft. high S. of cor. This impracticable. Hence I run
West, retracing bet. secs. 1 and 36.	
Over mountainous land, through	
short undergrowth of shadscale	
0.10 Wash, 15 lks. wide, 1 ft. deep,	course SE.
Ascend abruptly over solid	
sandstone bed rock.	
9.00 Rocky ridge, 150 ft. above wash,	brave N. 65° E. and S.
Descend abruptly over ledges.	
22.20 Wash, 15 lks. wide, 2 ft. deep,	140 ft. below ridge, course N.
Hence over sandy land facing	
N.	
40.04 Fall 3½ lks. S. of the 1½ sec. cor.,	which is a sandstone, 8 x 7 x 6 ins.
above ground, firmly set and	marked and witnessed as described
marked and witnessed as described	by the Surveyor General.
I destroy all traces of the old cor.,	
and reestablish it at the same point	
as follows:	
Set an iron post, 3 ft. long, 1 in. in	
dia., 26 ins. in the ground for 1½	
sec. cor., marked on brass cap 1½	
S 36 on N. half and S 1 on S. half,	
dig pits, 18 x 18 x 12 ins., E. & W. of	
post, 3 ft. dist., raise a mound	
of stone, 2 ft. base, 1½ ft. high N.	
of cor.	

BK. 332  
Ratracement of the N. bdy. of T. 24 S., R. 16 E.

chain

The true bearing of this line is N.  $89^{\circ} 57'$  W., and the distance is 40.04 chs.

From the  $\frac{1}{4}$  cor. I continue West

Gradually ascend.

10.00 Ridge, bears N. & S.

Descend 50 ft. to

28.50 Wash, 20 lks. wide, course NW.

Gradually ascend

29.50 wagon road to Green River, Utah,  
bears N. & S.

40.23 Fall 5 lks. S. of the cor. of secs.  
1, 2, 35 and 36 which is a sandstone  
8 x 9 x 5 ms. above ground, firmly  
set, and marked and witnessed  
as described by the Surveyor  
General.

I destroy all traces of the old cor.,  
and reestablish it at the same  
point as follows:

Set an iron post, 3 ft. long, 3 ms. in  
dia., 24 ms. in the ground for cor.  
of secs. 1, 2, 35 and 36, marked  
on brass cap.

T 23 S R 16 E. on N. half,

T 24 S on S. half,

S 35 in NW.,

S 36 in NE.,

S 1 in SE. and

S 2 in SW. quadrant,

raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high W. of cor.

Pits impracticable.

The true bearing of this line is N.  $89^{\circ} 56'$  W., and the distance is 40.23 chs.

Land, mountainous and rolling.  
Soil; sandy and rocky, on rocky  
sub-soil; 4<sup>th</sup> rate

No timber

Retracement of the N. bdy. of T. 24 S., R. 16 E.

Chains.	
	Under growth, short shadscale. Mountainous land, 22.20 chs.
1.70	West, retracing bet. secs. 2 & 35 Over hilly land, draining N. Ascend 20 ft. to Low ridge, bears N. & S.
20.00	Descend, 125 ft. to Wash, 15 lcs. wide, course N. Ascend 75 ft. to
38.00	Spur, projects N. Hence over broken land.
40.40	Fall 2 lcs. S. of the $\frac{1}{4}$ sec. cor., which is a sandstone, 8 x 8 x 5 ins. above ground, firmly set and marked and witnessed as described by the Surveyor General. I destroy all traces of the old cor. and reestablish it at the same point as follows: Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4} S^{\circ} 35'$ on N. half and $S^{\circ} 2'$ on S. half, raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor. Post impracticable
	The true bearing of this line is N. $89^{\circ} 58' W.$ , and the distance is 40.40 chs.
	From the $\frac{1}{4}$ sec. cor., I continue West.
13.70	Base of hills, bears N. & S. Enter cottonwood timber Hence over bottom land, subject to overflow.
23.00	Right bank of San Rafael river, course N. Hence across channel of stream, some alkali water.

Retracement of the N. bdy. of T. 24 S., R. #6 E.

chains

- 25.00 Left bank of river, course N.  
 39.00 River timber and bottom land,  
 bears NE. and S.  $70^{\circ}$  W.  
 ascend 30 ft. to  
 110.30 Spur, projects S.  
 Fall 1 ch. S. of the cor. of secs. 2, 3  
 34 and 35 which is a sandstone,  
 8 x 8 x 6 ins. above ground, firmly  
 set and marked and witnessed  
 as described by the Surveyor  
 General.

Destroy all traces of the old cor.  
 and reestablish it at the same  
 point as follows:

Set an iron post, 3 ft. long, 3 ins. in  
 dia., 24 ins. in the ground for cor.  
 of secs. 2, 3, 34 and 35, marked  
 on brass cap.

T 23 S R 16 E on N. half,

T 24 S' on S. half,

S 34 in NW,

S 35 in NE,

S 2 in SE. and

S 3 in SW. quadrant;

raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high W. of cor.

Pits impracticable

The true bearing of this line is  
 71.  $84^{\circ} 54'$  W.; and the distance is  
 110.30 ch.

Land, hilly and level.

Soil, gravelly and sandy loam;  $3^{\text{rd}}$   
 and  $1^{\text{st}}$  rates.

Timber, cottonwood

Undergrowth, shade scale.

Rich sandy loam soil on bottom  
 land of San Rafael river and has  
 a dip sub soil;  $1^{\text{st}}$  rate.

West, retracing bot. secs. 3 & 34

Retracement of the N. bdy. of T. 24 S., R. 16 E.

Chains	
	over mountainous land.
1.25	descend 30 ft. to Left bank of San Rafael river, course $S. 70^{\circ} E.$ . Hence up nearly dry channel of stream
10.25	Left bank of river, bears $N. 75^{\circ} E.$ , and SW. Enter bottom land and cottonwood timber
13.00	Leave bottom land and timber, bears NE. and S. Hence over broken land draining S.
39.80	Wash, 8 lks. wide, course S.
40.23	The $\frac{1}{4}$ sec. cor., which is a sandstone, $9 \times 11 \times 6$ in. above ground, firmly set, and marked and witnessed as described by the Surveyor General. I destroy all traces of the old cor., and reestablish it at the same point as follows: Set an iron post, 3 ft. long, 1 in. in dia., 26 in. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4} S^{\circ} 34' 30''$ on N. half and $S^{\circ} 3' 30''$ on S. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. It's impracticable.
	The true bearing of this line is West, and the distance is 40.23 chs. Sept. 25: At this cor., I set off $0^{\circ}$ $37' S.$ , on the decl. arc; and at $11^{\text{h}} 52^{\text{m}}$ a.m. l.m.t., observe the sun on the meridian; the resulting lat. is $38^{\circ} 46'$ From the $\frac{1}{4}$ sec. cor., I continue West, gradually ascend.

## Retracement of the N. bdy. of T. 24 S., R. 16 E.

chain.

40.27 Fall 2 lbs. N. of the cor. of secs. 3, 4, 33 and 34 which is a sandstone,  $24 \times 8 \times 6$  ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General.

I destroy all traces of the old cor. and reestablish it at the same point as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in a mound of stone, 4 ft. base, 2 ft. high for cor. of secs. 3, 4, 33 and 34, marked on brass cap

T 23 S R 16 E on N. half,

T 24 S on S. half,

S 33 'm NW,

S 34 'm NE,

S 3 'm SE and

S 4 'm SW quadrant,  
raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.

Pits impracticable

Note: On account of natural obstacles, I am unable to set post in the ground.

The true bearing of this line is  
S.  $89^{\circ} 58' W.$ , and the distance is  
40.27 chs.

Rand, hilly with a general drain to the south.

Soil, gravelly and rocky on rocky sub-soil; 4<sup>th</sup> rate. On W. 40.27 chs. sandstone bed rock close to surface. Timber, some cottonwoods on river bottom.

Undergrowth, short shadscale and some greasewood.

Some grass for grazing

Retracement of the N. bdy. of T. 34 S., R. 16 E.

Chano	West, retracing bet. secs. 4 and 33. Over mountainous land.
12.56	Descend abruptly over ledges on N.E. face ridge. Ridge, 160 ft. above sec. cor., bears E. and S. $70^{\circ}$ W.
18.00	Hence along N. face ridge. Same ridge, bears N. & S.
40.28	Descend 100 ft. to fall 2 lks. N. of the $\frac{1}{4}$ sec. cor., which is a sandstone, $14 \times 8 \times 5$ in. above ground, firmly set, and marked and witnessed as described by the Surveyor General I destroy all traces of the old cor., and reestablish it at the same point as follows. Set an iron post, 3 ft. long, 1 in. in dia., 26 in. in a mound of stone, 1 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4} S 33$ on N. half and S. $4$ on S. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. It's impracticable
	Note: On account of natural obstacles I am unable to set post in the ground. The true bearing of this line is S. $89^{\circ} 58' W.$ , and the distance is 40.28 chs.
	From the $\frac{1}{4}$ sec. cor. I continue West. Gradually descend. Wash, 15 lks. wide, 6 ft. deep, course S.
15.50	Ascend.
21.00	Begin ascent over ledges and solid sandstone bed rock.
33.50	Top of ascent and bench, 180 ft.

Retracement of the N. bdy. of T. 24 S., R. 16 E.

Chains

above wash, bears N. & S.

Hence across branch

at 1.00 Leave branch, bears N. & S.

Descend abruptly 60 ft. to

140.33 Fall 8 lks. S. of the cor. of secs.

4, 5, 32 and 33 which is a sandstone  $2\frac{1}{2} \times 12 \times 4$  ins., firmly set in a mound of stone, and marked and witnessed as described by the surveyor General

Point for sec. cor. falls on edge of wash and steep rocky slope.

Being unable to set an iron post on solid ground within a reasonable distance of this cor. I do not reestablish it.

The true bearing of this line is N.  $89^{\circ} 53'$  W., and the distance is 140.33 chs.

Land, mountainous, with a general drain to the south.

Soil, gravelly and rocky on rocky sub-soil; 4<sup>th</sup> rate: Bed rock close to surface

No timber

Undergrowth, short shadscale

Mountainous land 80.61 chs.

September 25-1911

September 26: Storm of rain prevents field work until 9:30 a.m.

At  $9^{\text{th}} 52^{\text{m}}$  a.m. l.m.t., I set off  $38^{\circ}$   $116'$  on the lat. arc;  $0^{\circ} 58' S.$ , on the decl. arc, and determine a meridian with the solar at the cor. of secs. 4, 5, 32 and 33.

Hence I run

west, retracing bat. secs. 5 and 32. over mountainous land.

0.05 Wash, 10 lks. wide, 5 ft. deep, coarse

Retracement of the N. bdy. of T. 24 S., R. 16 E.

Chains.

S.

Hence ascend over broken land  
draining S.

- 16.00 Top of ascent and sandy brush  
bears N. + S.  
Gradually descend over rolling  
sandy brush land.
- 40.00 Fall 12 lks. N. of the  $\frac{1}{4}$  sec. cor.,  
which is a sandstone,  $3 \times 9 \times 8$  ins.,  
lying on the ground, marked  $\frac{1}{4}$   
on one face and unmarked.  
I destroy all traces of the old cor.  
and reestablish it at the same  
point as follows.

Set an iron post, 3 ft. long, 1 in.  
in dia., 26 ins. in the ground for  
 $\frac{1}{4}$  sec. cor., marked on brass cap  
 $\frac{1}{4} S 3\frac{1}{2}$  on N. half and  $S 5$  on S.  
half, dig pits,  $18 \times 18 \times 12$  ins., E. + W.  
of post 3 ft. dist., raise a mound  
of earth  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high N.  
of cor.

Note: Cor. situated on shifting  
sand.

The true bearing of this line is  
 $S. 89^{\circ} 50' W.$ , and the distance is  
40.00 ebs.

From the  $\frac{1}{4}$  sec. cor. I continue  
West.

- 40.28 Fall 18 lks. S. of the cor. of secs.  
5, 6, 31 and 32 which is a greatly  
decayed cottonwood stake, lying  
on the ground, with marks nearly  
obliterated

I destroy all traces of the old cor.  
and reestablish it at the same  
point as follows:

Set an iron post, 3 ft. long, 3 ins.  
in dia., 24 ins. in the ground  
for cor. of secs. 5, 6, 31 and 32

## Retracement of the N. bdy. of T. 24 S., R. 16 E.

chains	<p>marked on brass cap.</p> <p>T 23 S R 16 E on N. half,</p> <p>T 24 S on S. half,</p> <p>S 31 in NW.,</p> <p>S 32 in NE.,</p> <p>S 5 in SE. and</p> <p>S 6 in SW. quadrant, dig pits, <math>18 \times 18 \times 12</math> ins. in each sec., <math>5\frac{1}{2}</math> ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high W. of cor.</p> <p>Note: Cor. situated on shifting sand.</p> <p>The true bearing of this line is N. <math>89^{\circ} 45'</math> W., and the distance is 40.28 chs.</p> <p>Land, rolling and mountainous. E. 16 chs. mountainous land, draining S. Soil, rocky on rocky sub-soil, 4<sup>th</sup> rate.</p> <p>W. 64.28 chs. rolling brush land draining SW. Soil, sandy with a sand and gravel sub-soil, 2<sup>nd</sup> rate. Some good grass for grazing. No timber.</p> <p>Undergrowth, short shadscale.</p> <p>Mountainous land, 16.00 chs.</p>
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	<p>West, retracing lat. secs. 6 and 31. Over rolling sandy land.</p> <p>40.20 Fall 40 lks. N. of the <math>\frac{1}{4}</math> sec. cor., which is a greatly decayed cottonwood stake, with marks nearly obliterated. I destroy all traces of the old cor., and reestablish it at the same point as follows:</p> <p>Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for <math>\frac{1}{4}</math> sec. cor., marked on brass cap <math>\frac{1}{4}</math> S 31 on N. half and S 6 on S. half.</p>
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Retracement of the N. bdy. of T. 24 S., R. 16 E.

Chains.

dig pits, 18 x 18 x 12 ins, E. and W. of post 3 ft. dist., raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high N. of cor.

Note: Cor. is situated on shifting sand. The true bearing of this line is S.  $89^{\circ} 26' W.$ , and the distance is 40.20 chs. From the  $\frac{1}{4}$  sec. cor., I continue West.

44.75 Leave branch, bears N. + S., descend.  
47.36 Fall  $32\frac{1}{2}$  lks. S. of the cor. of T. 23 and 24 S., R. 15 and 16 E., which is a sandstone,  $24 \times 20 \times 4$  ins, lying on the ground and marked and witnessed as described by the Surveyor General.

I destroy all traces of the old cor. and reestablish it at the same point as follows: Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of T. 23 and 24 S., R. 15 and 16 E., marked on brass cap

T 23 S on N. half,

T 24 S on S. half,

R 15 E S $36^{\prime}$  in NW.,

R 16 E S $31^{\prime}$  in NE.,

R 16 E S $6^{\prime}$  in SE. and.

R 15 E S $1^{\prime}$  in SW., quadrant,

raise a mound of earth, 2 ft. base,  $1\frac{1}{2}$  ft. high S. of cor.

Pits impracticable

The true bearing of this line is N.  $89^{\circ} 37' W.$ , and the distance is 47.36 chs.

Land, rolling with general SW.

drain:

Soil, sandy with sandy sub soil; 2<sup>nd</sup> rate.

No timber

Mudgy growth, short shadscale

Retracement and Resurvey of the W. bdy. of T. 24 S., R. 16 E.

Survey commenced September 26,  
1911.

I know the instrument to be in  
perfect adjustment by recent tests  
on Polaris observations, September  
24:

For solar observation see line bet.  
secs. 5 and 32, N. bdy. of T. 24 S., R. 16 E.

From the cor. of Ts. 23 & 24 S., Rs. 15  
and 16 E., I run

South, retracing bet. secs. 1 and 6.

Over hilly land, gradually  
ascend along west slope of branch

13.25 Top of branch, bears N.  $30^{\circ}$  E. and  
SW.

Hence across west end of branch

Fall 39 lbs. E. of the  $\frac{1}{4}$  sec. cor.,  
which is a sandstone,  $10 \times 8 \times 4$  ins.,  
firmly set in a mound of stone,  
marked and witnessed as described  
by the Surveyor General.

I destroy all traces of the old cor.  
and reestablish it at the same  
point as follows:

Set an iron post, 3 ft. long, 1 in. in  
dia., 26 ins. in a mound of stone  
4 ft. base, 2 ft. high for  $\frac{1}{4}$  sec.

Cor., marked on brass cap  $\frac{1}{4}$   
S 1 on W. half and S 6 on E. half,  
raise a mound of stone, 2 ft.  
base,  $1\frac{1}{2}$  ft. high W. of cor.

Pits impracticable.

Note: On account of natural  
obstacles I am unable to set  
post in the ground.

The true bearing of this line is S.  $0^{\circ}$   
 $35'$  W., and the distance is 38.30  
chs.

From the  $\frac{1}{4}$  sec. cor. I continue  
South.

1.70 Leave branch, bears NW. and SE.

Resurvey and Retracement of the W. bdy. of T. 24 S., R. 16 E.

Chains

- 27.60 Descend abruptly over solid sandstone bedrock, 125 ft. to wash, 10 lks. wide, 3 ft. deep, course SW  
Leave bed rock, enter rolling gravelly land
- 40.04 Fall 3 lks. W. of the cor. of secs. 1, 6, 7 and 12 which is a sandstone,  $16 \times 14 \times 5$  ins., above ground, firmly set, and marked and witnessed as described by the Surveyor General.  
I destroy all traces of the old cor. and reestablish it at the same point as follows:  
Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 1, 6, 7 and 12, marked on brass cap
- T 24 S on N. half,  
R 15 E S<sup>1</sup>/4 m NW,  
R 16 E S<sup>1</sup>/4 m NE,  
S<sup>7</sup> m SE and  
S<sup>1</sup>/<sub>2</sub> m SW quadrant,  
dig pits,  $18 \times 18 \times 12$  ins. in each sec.,  $5\frac{1}{2}$  ft. dist, raise a mound of earth, 4 ft. base, 2 ft. high W. of cor.  
The true bearing of this line is S.  $0^{\circ}02'$  E., and the distance is 40.04 chs.
- Land, rolling and mountainous with a general SW. drain  
Soil, sandy, gravelly and rocky; on gravel and rocky sub-soil,  $3\frac{1}{2}$  and  $4\frac{1}{2}$  rates.  
No timber  
Undergrowth, short shadscale  
Mountainous land 25.90 chs.
- September 26: The sky is overcast

## Retracement and Resurvey of the W. bdy. of T. 24 S., R. 16 E.

Chain:

observations for latitude impossible

South, retracing bet. secs. 7 and 12  
over rolling land sloping SW.  
Gradually descend.

40.26 Fall 8 lbs. E. of the  $\frac{1}{4}$  sec. cor.  
which is a sandstone  $8 \times 10 \times 1$  m<sup>s</sup>,  
lying in a mound of stone, marked  
and witnessed as described by the  
Surveyor General.

I destroy all traces of the old cor. and  
reestablish it at the same point as  
follows.

Set an iron post, 3 ft. long, 1 in. in  
dia., 26 m<sup>s</sup>. in the ground for  $\frac{1}{4}$   
sec. cor., marked on brass cap  $\frac{1}{4}$   
 $S\ 12$  on W. half and  $S\ 7$  on E. half,  
raise a mound of stone 2 ft. base,  
 $1\frac{1}{2}$  ft. high W. of cor.

Pits impracticable

The true bearing of this line is  $S.07^{\circ}$   
W., and the distance is 40' 26 chs.

Land, rolling draining SW.

Soil, gravelly  $3^{\frac{1}{2}}$  rate.

No timber

No undergrowth.

From the  $\frac{1}{4}$  sec. cor. I run, South  
and at 40.00 chs. I am unable to find  
any trace of the cor. of secs. 7, 12, 13  
and 18, I therefore continue my line  
south, and at 120.30 chs., fall 13 lbs.  
W. of the cor. of secs. 13, 18, 19 and 24  
which is a quartzite stone,  $8 \times 10 \times 6$   
m<sup>s</sup>, above ground firmly set and  
marked and witnessed as described  
by the Surveyor General.

I destroy all traces of the old cor.  
and reestablish it at the same  
point as follows:

Retracement and Resurvey of the W. bdy. of T. 24 S., R. 16 E.

chain.

Set an iron post, 3' ft. long, 3 in. in dia., 24 in. in the ground for cor. of secs., 13, 18, 19<sup>1</sup> and 24, marked on brass cap

T 24 S. on N. half,

R 15 E S 13 m NW.

R 16 E S 18 m NE.

S 19<sup>1</sup> m SE, and

S 24 m SW. quadrant,

dig pits, 18 x 18 x 12 in. in each sec.; 5<sup>1</sup>/<sub>2</sub> ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high W. of cor.

The falling answer to a correction of 0° 04' or 4<sup>1</sup>/<sub>2</sub> ft. per half mile, counting from the  $\frac{1}{4}$  sec. cor. bet. secs. 7 and 12.; therefore I run N. 0° 04' W., resurveying bet. secs. 13 and 18.

over mountainous land draining NW.

0.30 Wash, 10 lks. wide, course NW.

Ascend 40 ft. to

2.25 Spur, projects W.

Begun descent over north face of solid sandstone ridge.

40.10 Proportionate measurement  
Point for  $\frac{1}{4}$  sec. cor. falls on solid sandstone bed rock, mark + for exact cor point, and set an iron post, 3 ft. long, 1 in. in dia., 26 in. in a mound of stone, 4 ft. base, 2 ft. high for reestablished  $\frac{1}{4}$  sec. cor., marked on brass cap  $\frac{1}{4}$  S 13 m W.

half and S 18 ion E. half, raise a mound of stone, 2 ft. base, 1<sup>1</sup>/<sub>2</sub> ft. high W. of cor.

Pits impracticable

Note: On account of natural obstacles, I am unable to set post in the ground.

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Retracement and Recovery of the W. bdy. of T. 24 S., R. 16 E.

Chains.

- Continue to descend.
- 42.80 Base of sandstone bed rock and gulch, drains NW.  
Hence over land facing W.
- 66.05 Top 60 ft. ledge and S. side canyon  
brars E. & W.,  
descend.
- 66.75 Bottom of canyon and wash 30  
lks. wide 420 ft. below sec. cor.,  
course E.  
Ascend abruptly.
- 67.25 Top 70 ft. ledge and N. side of canyon,  
brars E. & W.  
Hence over land facing nearly  
east.
- 80.20 Proportionate measurement,  
Set an iron post, 3 ft. long, 3 ins.  
in dia., 24 ins. in a mound of stone  
4 ft. base, 2 ft. high for cor. of secs.  
7, 12, 13 and 18, marked on brass  
cap
- T 24 S. on N. half.  
R 15 E S  $\frac{1}{2}$  mi NW,  
R 16 E S  $\frac{7}{8}$  mi NE,  
S 18 m SE. and  
S 13 m SW. quadrant,  
raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high, W. of cor.  
Post impracticable
- Note: On account of natural obstacles,  
I am unable to set post in the  
ground.
- Land, mountainous, draining N.  
Soil, rocky; on rocky sub-soil;  
4<sup>th</sup> rate
- No timber
- No undergrowth
- Mountainous land, 80.20 chs.

7.0° 04' W. resurveying lot. secs. 7 and

Retracement and Resurvey of the W. bdy. of T. 24 S., R. 16 E.

Chains	
12.	Very mountainous land.
6.50	Descend abruptly 100 ft. to Base of mountain, bears N.W. & S.E. Enter scattering timber and bottom land subject to overflow.
19.25	Right bank of San Rafael river, course E. 10 chs, thence S. Hence across nearly dry channel of stream
20.00	Left bank of river and base of 80 ft. perpendicular sandstone ledge, bears E. & W. Ascend.
20.50	Top of ledge, bears E. & W. Leave timber, gradually ascend The $\frac{1}{4}$ sec. cor. bet. secs. 7 and 12 heretofore described.
40.10	Land, mountainous and level, draining N.E. and S. to the San Rafael river. Soil, rocky and sandy loam; 4 <sup>th</sup> and 1 <sup>st</sup> rates. Timber cottonwoods on 12.75 chs. No undergrowth. Rich sandy loam land on 12.75 chs. of river bottom. Mountainous land 27.35 chs.
September 26, 1911	

September 27: Continuous storm  
of rain prevents field work this day.

September 28: At 7<sup>h</sup>. 51<sup>m</sup>. a.m. I m.t.,  
I set off  $38^{\circ} 43'$  on the lat. arc;  $1^{\circ} 43'$   
S., on the decl. arc; and determine  
a meridian with the solar at the  
cor. of secs. 13, 18, 19 and 24.  
Hence I run  
South, retracing lat. secs. 19 and

Retracement and Resurvey of the W. bdy. of T. 24 S., R. 16

Chains	
	24.
40.00	No trace of the $\frac{1}{4}$ sec. cor. can be found.
80.57	Tall 28 lks. E. of the cor. of secs. 19, 24, 25 and 30 which is a red sandstone $16 \times 12 \times 3$ ms. above ground, loosely set and marked and witnessed as described by the Surveyor General. I destroy all traces of the old sec. cor., and reestablish it at the same point as follows: Set an iron post, 3 ft. long, 3 ms. dia., 24 ms. in the ground for cor. of secs. 19, 24, 25 and 30, marked on brass cap $T 24 S$ on N. half, $R 15 E S$ 24m NW, $R 16 E S$ 19 m NE, $S$ 30 m SE. and $S$ 25 m SW. quadrant, dig pits, $18 \times 18 \times 12$ ms., in each sec. 5 ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high W. of cor. The true bearing of this line is. $S. 0^\circ 12' W.$ , and the distance is 80.57 chs. Hence I run $N. 0^\circ 12' E.$ , resurveying back secs. 19 and 24. Over sandy land, through short undergrowth of shadscale.
28.75	Wash, 15 lks. wide, course W.
36.50	Ascend 50 ft. to Low ridge, bears E. & W.
40.00	Descend 25 ft. to Wash, 25 lks. wide course SW
40.28 $\frac{1}{2}$	Proportionate measurement. Set an iron post, 3 ft. long, 1 m. dia., 26 ms. in a mound of stone

Retracement and Resurvey of the W. bdy. of T. 24 S., R. 16 E.

Chains	
	4 ft. base, 2 ft. high, for reestablished $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4} S 24$ on W. half and $S 19$ on E. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
	Pits impracticable
	Note: On account of natural obstacles I am unable to set post in the ground.
48.50	Wash, 10 lks. wide, course SE.
65.25	Wash, 10 lks. wide, course S. $30^\circ E.$
	Ascend 60 ft. to
77.50	Ridge, bears E. & W.
	Descend 50 ft. to
80.57	The cor. of secs. 13, 18, 19 and 24. Land, hilly with general W. drain.
	Soil, sandy and rocky: 2 <sup>nd</sup> and $4^{th}$ rate.
	No timber.
	Undergrowth, short shadscale. Good grass for grazing on S. 40.00 chs.
	From the cor. of secs. 19, 24, 25 and 30, I run
	South, retracing bat. secs. 25 and 30.
	Over rolling sandy land, through short undergrowth of shadscale.
23.00	Wash, 10 lks. wide, 2 ft. deep, drains SE.
	Gradually ascend.
40.13	Fall 11 lks. E. of the $\frac{1}{4}$ sec. cor., which is a sandstone $16 \times 15 \times 5$ ins., above ground, firmly set and marked and witnessed as described by the Surveyor General.

Retracement and Resurvey of the W. bdy. of T. 24 S., R. 16 E.

chain.

I destroy all traces of the old cor. and reestablish it at the same point as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 in. in the ground for  $\frac{1}{4}$  sec. cor., marked on brass cap  $\frac{1}{4}$   
 $S 25^{\circ}$  on W. half and  $S 30^{\circ}$  on E. half,  
dig pits  $18 \times 18 \times 12$  in., N. & S. of post,  
3 ft. dist., raise a mound of earth  
 $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high W. of cor.  
The true bearing of this line is  
 $S.0^{\circ}09'W.$ , and the distance is  
40.13 chs.

From the  $\frac{1}{4}$  sec. cor., I continue South.

11.00 Low sandstone ridge, bears E. and W.

Hence over series of small spurs and hollows.

38.00 Top of level brush, bears  $N.35^{\circ}W.$  and E.

Hence across brush

40.13 Intersect evident remains of the old cor. of secs. 25, 30, 31 and 36, which is a group of 8 quartzite stones, but none marked.

I destroy all traces of the old cor. and reestablish it at the same point as follows.

Set an iron post, 3 ft. long, 3 in. in dia., 24 in. in the ground for cor. of secs. 25, 30, 31 and 36, marked on brass cap,

T 24 S. on N. half.

R 15 E S 25 m NW,

R 16 E S 30 m NE,

S 31 m SE. and

S 36 m SW. quadrant,

dig pits,  $18 \times 18 \times 12$  in., in each sec.,  $5\frac{1}{2}$  ft. dist.; raise a mound

Retracement and Resurvey of the W. bdy. of T. 24 S., R. 16

chains.	<p>of earth, 4 ft. base, 2 ft. high W. of cor.</p> <p>The true bearing of this line is south and the dist. since is 40.13 chs. Land, rolling with general easterly drain.</p> <p>Soil, sandy and bad rocky with sandy and bad rock sub-soil; 3<sup>rd</sup> rate.</p> <p>Mudgy growth short shadscale.</p> <p>No timber.</p> <p>Some good grass for grazing purposes.</p>
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38.00	<p>South, retracing bet. secs. 31 and 36.</p> <p>Over level bunch, through deep shifting sand and mudgy growth of shadscale.</p> <p>Leave bunch, bears N. 80° E., N. 60° W., 5 chs., thence S.</p> <p>Descend.</p>
40.14	<p>Fall 13 lks. E. of the <math>\frac{1}{4}</math> sec. cor., which is a limestone <math>9 \times 9 \times 6</math> ins., lying on the ground, marked <math>\frac{1}{4}</math> on one face and univitressed. I destroy all traces of the old cor. and reestablish it at the same point as follows:</p> <p>Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for <math>\frac{1}{4}</math> sec. cor., marked on brass cap <math>\frac{1}{4} S 36</math> on W. half and <math>S 31</math> on E. half, raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high W. of cor.</p> <p>Pits impracticable.</p> <p>The true bearing of this line is S. 0° 11' W., and the distance is 40.14 chs.</p>

Retracement and resurvey of the W. bdy. of T. 24 S., R. 16

Chester

September 28: The sky is overcast at noon, observations for latitude impossible.

From the  $\frac{1}{4}$  sec. cor. I continue south.

over broken land facing E.

15.00 Low sandstone ridge, bears E. + W.  
descend 150 ft. to

37.00 Wash, near head of canyon, 20  
lks. wide, course N.  $35^{\circ}$  E.  
ascend.

40.08 Fall 35 lks. E. of the cor. of T.S. 24 +  
25 S., R. 15 and 16 E., which is a sand-  
stone,  $20 \times 12 \times 7$  mis. above ground  
loosely set and marked and witnessed as  
described by the Surveyor General.

I destroy all traces of the old cor., and  
reestablish it at the same point as follows:-  
Set an iron post, 3 ft. long, 3 mis. in dia.,  
2 mis. in the ground for cor. of T.S. 24  
and 25 S., R. 15 and 16 E., marked on  
brass cap

T 24 S on N. half,

T 25 S on S. half,

R 15 E S 36' in NW.,

R 16 E S 31' in NE.,

R 16 E S 6' in SE. and

R 15 E S 1' in SW. quadrant;

dig pits;  $24 \times 24 \times 12$  mis., on line, N., E.,  
and W. 4 ft., and south of post, 8 ft. dist.,  
raise a mound of earth, 5 ft. base,  $2\frac{1}{2}$  ft.  
high S. of cor.

The true bearing of this line is S.  $0^{\circ}30'15''$ ,  
and the distance is 40.08 chs.

Land, rolling with easterly drain.  
soil, sandy and rocky; 4<sup>th</sup> rate  
No timber.

Mudcrust, short shadscale  
some good grass for grazing.

September 28, 1911

East boundary of T. 24 S., R. 16 E.

chain.

Survey commenced September 28, 1911 and executed with a W. + L. E. Gurley solar compass No. 1043.

I examine the adjustments of the transit and correct the level and collimation <sup>errors</sup>, then, to test the solar apparatus by comparing its indications resulting from solar observations made during a.m. and p.m. hours. with a meridian established by observations, I proceed as follows:

I having observed Polaris at eastern elongation September 24 at the cor. of Ts. 23 and 24 S., Rs. 16 & 17 E. heretofore described, and knowing the meridian to be accurate, I test the solar apparatus upon this meridian. At 4<sup>h</sup>. 21<sup>m</sup>. p.m. l.m.t., I set off 38° 46' on the lat. arc; 1° 50' S., on the decl. arc; and determine a meridian with the solar. This meridian coincides with the Polaris meridian of September 24.

September 28, 1911

September 29: At 7<sup>h</sup>. 51<sup>m</sup>. a.m. l.m.t., I set off 38° 46' on the lat. arc; 2° 06' S., on the decl. arc; and determine a meridian with the solar. This meridian also coincides with the solar meridian.

The solar apparatus by p.m. and a.m. observations defines positions for meridians which agree with the Polaris meridian of September 24, therefore, I conclude that the adjustments of the instrument are satisfactory.

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East boundary of T. 24 S., R. 16 E.

chain:

- From the tp. cor. already described,  
9 m.,  
South, bet. secs. 1 and 6.  
Over broken land draining SE.  
Wash, 20 lks. wide, coarse SE.  
0.30  
8.00 Base of solid sandstone spur, bears  
NW. and SE.  
Ascend 60 ft. to  
12.00 Spur, projects E.  
Descend over sandstone ledges.  
15.00 Base of ledges and spur, bears  
E. & W.  
Hence over land facing E.  
18.75 West, 60 lks. are two sandstone  
pinnacles, 60 ft. high.  
20.50 Wash, 20 lks. wide, coarse E.  
39.80 Fractional distance equal to the  
fractional distance of the west bdy.  
of the tp., minus the northings of  
the north boundary of the tp.  
Set an iron post, 3 ft. long, 1 mi. in  
dia., 26 ins. in the ground for  $\frac{1}{4}$   
sec. cor., marked on brass cap  $\frac{1}{4}$   
 $S^{\circ} 1$  on W. half and  $S^{\circ} 6$  on E. half,  
raise a mound of stone, 2 ft. base  
 $1\frac{1}{2}$  ft. high W. of cor.  
Pits impracticable  
44.20 Enter solid sandstone bed rock and  
wash, 20 lks. wide, coarse SE.  
49.90 Top of 35 ft. sandstone ledge and  
right bank of Green river.  
Point for meander cor. fract. secs.  
1 and 6 falls on solid sandstone  
bed rock, mark + for exact cor.  
point and set an iron post, 3 ft.  
long, 3 ins. in dia., 24 ins., in a  
mound of stone, 1 ft. base, 2 ft.  
high for meander cor. fract. secs.  
1 and 6, marked on brass cap  
T 24 S. on N. half, R 17 E S $^{\circ} 6$  on E.

East boundary of T. 24 S., R. 16 E.

chains.	half, R. 16 E S <sup>1</sup> , on W. half, with MC to the south, raise a mound of stone, 2 ft. base, 1 1/2 ft. high N. of cor.
	It's impracticable
	Note: On account of natural obstacles I am unable to set post in the ground.
	To determine distance across river I place my instrument on line on left bank, then measure a base line east, 5 chs., to a point from which flag bears N. 33° 06' W. The base subtends an angle of 56° 54' to the meander cor. Therefore tan. 56° 54' x base or $1.534 \times 5 = 7.67$ chs., which added to 49.90 chs., makes to left bank of Green river
57.57	Set an iron post, 3 ft. long, 3 in. in dia., 24 ins. in the ground for meander cor. fract. secs. 1 and 6, marked on brass cap, T 24 S on N. half, R 17 E S <sup>6</sup> on E. half, R 16 E S <sup>1</sup> on W. half, with MC to the north, dig pits 36 x 36 x 12 ins., S. of post, 8 ft. dist., raise a mound of earth 4 ft. base, 2 ft. high S. of cor.
	Hence over bottom land through scattering cottonwood timber
76.60	Leave bottom land, bears E. & W. Ascend over ledges.
77.25	Top ledges, bears E. and W. Hence over rolling land.
79.80	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 1, 6, 7 and 12, marked on brass cap
	T 24 S <sup>1</sup> on N. half, R 16 E S <sup>1</sup> in NW,

## East boundary of T. 24 S., R. 16 E.

Chainia.

R. 17 E S<sup>1</sup>/<sub>2</sub> mi NE.

S 7' mi SE. and

S 12' mi SW. quadrant.

dig pits 18 x 18 x 12 ins. in each sec., 5<sup>1</sup>/<sub>2</sub> ft. dist.; raise a mound of earth  
4 ft. base, 2 ft. high W. of cor.

Land, rolling and hilly, draining  
SE. and N. to Green river.

Soil, rocky and sandy loam; 4<sup>th</sup>  
and 1<sup>st</sup> rates.

Timber a few scattering cottonwoods.  
Undergrowth, shadscale.

South, bet. secs. 7 and 12.

Dry rolling sandy land drain-  
ing NW.

Wash, 15 lks. wide, course NW.

Ascend 30 ft. to

Low spur, projects W.

Descend.

Wash, 10 lks. wide, 1 ft. deep.  
course W.

Set an iron post, 3 ft. long, 1 mi.  
in dia., 26 ins. in the ground for  
1/4 sec. cor., marked on brass cap  
1/4 S 12' on W. half and S 7' on E.  
half, raise a mound of stone,  
2 ft. base, 1 1/2 ft. high W. of cor.  
Pits impracticable

Ascend 50 ft. to

Top of brush, bears E. & W.

Leave brush, bears E. & W.  
Gradually descend.

Set an iron post, 3 ft. long, 3 ins.  
in dia., 24 ins. in the ground for  
cor. of secs. 7, 12, 13 and 18, marked  
on brass cap

" T 24 S on N. half,

R 16 E S 12' mi NW,

R 17 E S 7' mi NE.

East boundary of T. 24 S., R. 16 E.

Chains	<p>S<sup>o</sup> 18 mi SE. and  S<sup>o</sup> 13 mi SW. quadrant,  dig pits, 18 x 18 x 12 ins., in each sec.,  5 ft. dist.; raise a mound of earth  4 ft. base, 2 ft. high, W. of cor.  Land rolling with general west  drain.  Soil, sandy with rocky sub-soil;  4<sup>th</sup> rate  No timber  Undergrowth, short shadscale.  Some good grass for grazing</p>
	<p>South, bet. secs. 13 and 18.  Over broken hilly land draining  nearly west.</p>
4.50	Hollow, drains NW.
	Ascend 50 ft. to
14.00	Ridge, bears E. + W.
	Ascend 75 ft. to
22.00	Mash in hollow, 15 lks. wide, course SW.
	Ascend 60 ft. to
24.70	Top of west point of sandstone spur.
	Descend 75 ft. to
31.50	Mash in canyon, 40 lks. wide, course NW.
	Ascend from canyon.
37.00	Top of south side of canyon and solid sandstone knoll, bears E. and W.
	Descend.
40.00	At base of knoll. Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone, 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4} S 13$ on W. half and S 18 on E. half, raise a mound of stone

## East boundary of T. 24 S., R. 16 E.

Chains

2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.  
Pits impracticable

Note: On account of natural  
obstacles I am unable to set  
post in the ground.

Ascend 50 ft. to

41.50 Top sandstone knoll, extends east  
and west 1 ch.

66.00 Low sandstone ridge, bears E. & W.  
Descend 30 ft. to

71.00 Hollow drains SE.

Ascend.

80.00 Set an iron post, 3 ft. long, 3 nis.  
in dia., 24 ins. in a mound  
of stone, 4 ft. base, 2 ft. high for  
cor. of secs. 13, 18, 19 and 24,  
marked on brass cap

T 24 S on N. half,

R 16 E S 13 in NW.

R 17 E S 18 in NE.

S 19 in SE. and

S 24 in SW. quadrant.

raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high W. of cor.,

Pits impracticable

Note: On account of natural  
obstacles, I am unable to set  
post in the ground.

Land, mountainous, draining  
W.

Soil, sandy and rocky on rocky  
sub. soil, 4<sup>th</sup> rate

No timber

Undergrowth, short shadscale  
some grass for grazing.

Mountainous land, 8.00 chs.

September 29: The sky is overcast  
at noon, observations for lat.  
impossible

East boundary of T. 24 S., R 16 E.

Chambers

South, bet. secs. 19 and 24.

Over mountainous land.

Ascend over solid sandstone bed rock.

3.00 Top of ledge, 100 ft. high and left bank of Green river. Point for meander cor. falls on solid bed rock, mark + for exact cor. point, and set an iron post, 3 ft. long, 3 ins. in dia., 2 1/4 ins. in a mound of stone 4 ft. base, 2 ft. high for meander cor. fract. secs. 19 and 24, marked on brass cap T 24 S on N. half, R 17 E S 19' on E. half, R 16 E S 24' on W. half, and M C to the S., raise a mound of stone, 2 ft base, 1 1/2 ft. high N. of cor. Pits impracticable

Note: On account of natural obstacles I am unable to set post in the ground.

To determine distance across river, I set a flag on right bank, then measure a base line west, 4 chs., to a point from which flag bears S. 22° 24' E., from the flag the west end of the base bears N. 22° 24' W., therefore, tan 67° 36' × base or  $2.426 \times 4 = 9.70$  chs., which added to 3.00 chs. makes

12.70 To right bank of Green river. Set an iron post, 3 ft. long, 3 ins. in dia., 2 1/4 ins. in the ground for meander cor. of fract. secs. 19 and 24, marked on brass cap, T 24 S on N. half, R 17 E S 19' on E. half, R 16 E S 24' on W. half, with M C to the north, dig pit, 36 × 36 × 12 ins., S. of post, 8 ft. dist., raise a

## East boundary of T. 24 S., R. 16 E.

Chains	
	mound of earth 4 ft. base, 2 ft. high S. of cor.
32.50	Ascend 190 ft. to Ridge, bears E. & W. Descend
34.00	Wash, 15 ells. wide, course N. 60° E. Ascend.
40.00	Set an iron post, 3 ft. long, 1 m. in dia., 26 ms. in a mound of stone 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4} S 24$ on W. half and $S 19$ on E. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. It's impracticable Note: On account of natural obstacles I am unable to set post in the ground.
53.50	Sandstone ridge, bears E. & W. Descend 75 ft. to
67.50	Hollow, drains E. Hence over solid sandstone bed rock on top of ledge
80.00	Ledge of ledge, 50 ft. high and point for sec. cor., 20 m. solid bed rock. Mark + for exact cor. point and set an iron post, 3 ft. long, 3 ms. in dia., 24 ms. in a mound of stone, 4 ft. base, 2 ft. high for cor. of secs. 19, 24, 25 and 30, marked on brass cap T 24 S on N. half, R 16 E S 24 in NW, R 17 E S 19 in NE, S 30 in SE, and S 25 in SW quadrant. raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. It's impracticable Note: On account of natural

## East boundary of T. 24 S., R. 16 E.

chains

obstacles I am unable to set post in the ground.  
 Land, mountainous, draining E.  
 Soil, rocky on rocky sub-soil,  
 $4^{\text{th}}$  rate  
 No timber  
 No muddy growth  
 Mountainous land 8000 chs.

September 29, 1911

September 30: At 7 h. 50<sup>m</sup>. a.m. l.m.t., I set off  $38^{\circ} 42'$  on the lat. arc.,  $2^{\circ} 29 \frac{1}{2}' N.$ , on the decl. arc., and determine a meridian with the solar at the cor. of sec. 19, 24, 25 and 30.

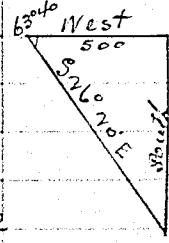
Hence I run South, bet. secs. 25 and 30 over mountainous land. Descend over ledges towards Green river

13.95 200 ft. below sec. cor., right bank of Green river:

Set an iron post, 3 ft. long, 3 in. in dia.,  $\frac{1}{4}$  in. in the ground for meander cor. of fract. secs. 25 and 30, marked on brass cap T 24 S on N. half, R 16 E S 30 on E. half, R 16 E S 25 on W. half with M.C. to the south, raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high N. of cor.

Its impracticable

To determine distance across river, I set a flag on line on left bank, then measure a base line, west 5 chs., to a point from which flag bears  $S 26^{\circ} 20' E.$ , from the flag the west end of the base bears  $N 26^{\circ} 20' W.$ , therefore tan  $63^{\circ} 40'$  base



8 Br. 352

East boundary of T. 24 S., R. 16 E.

Chains	
24.05	<p>or <math>2.02 \times 5 = 10.10</math> chs., which added to 13.95 chs., makes.</p> <p>To left. bank of Green river.</p> <p>Set an iron post, 3 ft. long, 3' ins. in dia., 24 ins. in the ground for meander cor. fract. secs. 25 and 30, marked on brass cap, T. 24 S on N. half, R. 17 E S 30 on E. half, R. 16 E S 25 on W. half, with M.C. to the north, dig pit 36 x 36 x 12 ins., S. of post, 8 ft. dist., raise a mound of earth 4 ft. base, 2 ft. high S. of cor. Hence over bottom land sloping west.</p>
40.00	<p>Set an iron post, 3 ft. long, 1' in in dia., 26 ins. in the ground for <math>\frac{1}{4}</math> sec. cor., marked on brass cap <math>\frac{1}{4}</math> S 25 on W. half and S 30 on E. half, dig pits 18 x 18 x 12 ins., N. &amp; S. of post, 3 ft. dist., raise a mound of earth, 3<math>\frac{1}{2}</math> ft. base 1<math>\frac{1}{2}</math> ft. high W. of cor.</p>
75.90	<p>Left bank of Green river</p> <p>Set an iron post, 3 ft. long, 3' ins. in dia., 24 ins. in the ground for meander cor. fract. secs. 25 and 30 marked on brass cap T. 24 S. on N. half, R. 17 E S 30 in E. half, R. 16 E S 25 on W. half, with M.C. to the S., dig pit, 36 x 36 x 12 ins., N. of post, 8 ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high N. of cor.</p> <p>The point for cor. of secs. 25, 30, 31 and 36 will fall in Green river.</p> <p>Land mount aridous and rolling soil, rocky and clay, 3<math>\frac{1}{2}</math> rate.</p> <p>No timber</p> <p>Undergrowth, shadscale and greasewood</p>

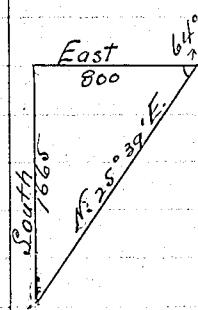
East boundary of T. 24 S., R. 16 E.

Chancos

Mountainous land 13.95 chs.

South, bet. secs. 31 and 36.

To determine the distance across Green river, I set a flag on top of high ledge to the south and measure a base line east from the meander cor. fract. secs. 25 + 30, 8.00 chs., to a point from which flag bears  $S. 25^{\circ} 39' W.$ , from the flag the east end of the base bears  $N. 25^{\circ} 39' E.$ , therefore tan.  $64^{\circ} 21' \times$  base or  $2.082 \times 8 = 16.65$  chs, or from true cor. point of secs. 25, 30, 31 and 36, which falls in Green river, makes



12.55 To top of vertical sandstone ledge 200 ft. high, on S. side of Green river.

Set an iron post, 3 ft. long, 3 in. in dia., 24 in. in a mound of stone 4 ft. base, 2 ft. high for witness cor. to the meander cor. of fract. secs. 31 and 36. marked on brass cap T 24<sup>S</sup> on N. half, R 17<sup>E</sup> S 31<sup>I</sup> on E. half, R 16<sup>E</sup> S 36 on W. half, with W.C.M.C to the north, raise a mound of stone, 2 ft. base, 1 1/2 ft. high S. of cor.

Pits impracticable

Note: On account of natural obstacles I am unable to set post in the ground.

I am unable to reach the right bank of Green river on account of vertical sandstone ledges, down which it is impossible to descend. The right bank of river bears N. about 7 chs.

## East boundary of T. 34 S., R. 16 E.

Chains	
	Thence over broken mountainous land.
15.60	Ridge, bears S. 60° E. and W. Gradually descended.
24.60	North side of deep box canyon and perpendicular sandstone ledges 200 to 300 ft. high, across which I am unable to chain. To determine distance across canyon, I erect a signal at this point and place my transit on line on south side, then measure a base line east, 6 chs. to a point from which flag bears N. 25° 50' W. The base subtends an angle of 64° 10' to the flag, therefore, tan. 64° 10' x base or .3.0655 x 6 = 12.39 chs., which added to 24.60 chs., makes
36.99	To south side of canyon, 350 ft. deep, bears E. and W. Gradually descended.
40.00	Set an iron post, 3 ft. long, 1 in. m dia., 26 lbs. in a mound of stone, 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S. 36° W. half and S. 31° E. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Post impracticable. Note: On account of natural obstacles, I am unable to set post in the ground. September 30: At this sec. cor., I set off 2° 34' S., on the decl. arc; and at 11° 50' a.m. l.m.t., observe the sun on the meridian; the resulting lat. is 38° 41'. Low ridge, bears E. and W.
40.80	

East boundary of T. 24 S., R. 16 E.

chain.	
	Hence descend over broken rocky land sloping SE.
75.75	North side of canyon, bears E. + W. Descend abruptly over ledges.
78.25	Wash in bottom of canyon, 30 lks. wide, 175 ft. below top course E. Ascend abruptly 75 ft. to
80.00	On steep N. slope amongst boulders. Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of T.S. 24 and 25 S., R.s. 16 and 17 E., marked on brass cap
	T 24 S on N. half, R 16 E S 3'6 in NW, R 17 E S 3'1 in NE, R 17 E S 1'6 in SE, R 16 E S 1'1 in SW quadrant and.
	T 25 S on S. half, raise a mound of stone, 3 ft. base, 2 ft. high, S. of cor. Pits impracticable Land, mount anious draining SE. Soil, rocky and solid sandstone bed rock on rocky sub soil: 4 <sup>th</sup> rate. No timber Mudery growth, some scattering spadscale. Some bunch grass for grazing on S. 35 chs. Mount anious land, 80.00 chs.

South boundary of T. 24 S., R. 16 E.

Chains

Survey commenced September 30, 1911, and executed with a W. & P. E. Hurley solar compass No. 1043. I know the instrument to be in perfect adjustment by tests on a Polaris meridian September 29, at the cor. of T.S. 23 & 24 S., Rs. 16 & 17 E.

From the cor. of T.S. 24 and 25 S., Rs. 16 & 17 E., I run

West, on a random line along the south boundary of the tp., setting temporary N sec. and sec. cor. at intervals of 40.00 chs.

160.00 Cease work, on account of storm of rain which commences at 2 P.M.

September 30, 1911.

October 1: Storm of rain prevents field work.

October 2: Storm of rain prevents field work.

October 3: At 6<sup>h</sup> 50<sup>m</sup> a.m. l.m.t., I set off  $35^{\circ}41'$  on the lat. arc;  $3^{\circ}37' 71.$ , on the decl. arc; and determine a meridian with the solar. Hence I continue,

West, on random line along the S. bdy. of the tp., and at 491.79 chs., intersect the Green River Guide Meridian, 18 chs. 71. of the cor. of T.S. 24 and 25 S., Rs. 15 and 16 E., heretofore described. The falling allows to a correction of  $0^{\circ}01'.00$ . 3 deg. S. per. mile, counting from the SE. cor. of the tp.; therefore I run

$71.89^{\circ}59' E.$ , bet. secs. 6 & 31.

Over mountainous land

Accord 30 ft. to

Spur. projects NE.

South boundary of T. 24 S., R. 16 E.

Chains.	
	Descend 40 ft. to
9.00	Wash, 40 eks. wide, 4 ft. deep, course N.
	Gradually ascend
30.00	Spur, projects N.
	Descend
34.40	Wash, 15 eks. wide, 10 ft. deep, course NW.
	Ascend over solid sandstone bed rock.
47.00	Ridge, 75 ft. above wash, bears N. & S.
	Gradually descend.
51.79	Set an iron post, 3 ft. long, 1 in. in dia., 2 <sup>1</sup> / <sub>2</sub> in. in a mound of stone, 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 31 on N. half and S 6° on S. half, raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
	Pits impracticable.
	Note: On account of natural obstacles, I am unable to set post in the ground.
	October 3: At this cor. I set off $3^{\circ} 44'$ S., on the decl. arc; and at 11 <sup>h</sup> . 50 <sup>m</sup> a.m. l. m. t., observe the sun on the meridian; the resulting lat. is $38^{\circ} 41'$
79.00	Wash, 10 eks. wide, course NE.
	Leave sandstone bed rock, bears N. and S.
	Gradually descend over rocky land.
91.79	Set an iron post, 3 ft. long, 3 in. in dia., 2 <sup>1</sup> / <sub>4</sub> in. in a mound of stone, 4 ft. base, 2 ft. high for cor. of secs. 5, 6, 31 and 32, marked on brass cap
	T 24 S R 16 E. on N. half, T 25 S on S. half;

South boundary of T. 24 S., R. 16 E.

chains

S 31 in NW.,

S 32 in NE.,

S 5 in SE., and

S 6 in SW. quadrant,

raise a mound of stone, 2 ft. base,  
1½ ft. high W. of cor.

Pits impracticable

Note: On account of natural obstacles

I am unable to set post in the ground.

Land, mountainous, draining N.  
Soil, rocky and sandy on rocky  
sub-soil; 14<sup>th</sup> rate.

No timber.

Undergrowth, short shadscale.

Mountainous land on 91-79 chs.

D. 89° 59' E., stak. secs. 5 and 32.

Over mountainous land.

Descend 125 ft. to

15.25 Wash in canyon, 30 lks. wide,  
course N.

Ascend 50 ft. to

17.00 East side of canyon, bears N. + S.  
Hence over broken land draining  
N.

31.00 Wash, 10 lks. wide, 5 ft. deep,  
course NW.

Ascend 25 ft. to

35.00 Low ridge, bears N. + S.

Descend.

40.00 Set an iron post, 3 ft. long, 1 in. in  
dia., 26 in. in a mound of stone,  
4 ft. base, 2 ft. high for 1/4 sec. cor.,  
marked on brass cap 1/4 S 32 on N.  
half and S 5 on S. half, raise a  
mound of stone, 2 ft. base, 1½ ft.  
high N. of cor.

Pits impracticable

Note: On account of natural  
obstacles I am unable to set post in

South boundary of T. 24 S., R. 16 E.

chains	
	the ground.
46.00	Wash, 8 lks. wide, course NW. Ascend.
71.00	Enter solid sandstone bed rock, beats N. & S.
80.00	175 ft. above $\frac{1}{4}$ sec. cor. Point for sec. cor. falls on solid sandstone bed rock, mark + for exact. cor. Point. Set an iron post, 3 ft. long, 3 in. in dia., 24 in. in a mound of stone, 4 ft. base, 2 ft. high for cor. of secs. 4, 5, 32 and 33, marked on brass cap
	T 24 S R 16 E on N. half, T 25 S on S. half.
	S 32 in NW., S 33 in NE., S 4 in SE. and S 5 in SW. quadrant. raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high. W. of cor. Pits impracticable
	Note: On account of natural obstacles I am unable to set post in the ground.
	Land, mountainous, draining N.
	Soil, rocky on rocky sub-soil; 4 <sup>th</sup> rate.
	No timber.
	Undergrowth, short shadscale.
	Mountainous land. 80.00 chs.
10.00	N. 89° 59' E., bet. secs. 4 and 33 Over mountainous land, across solid sandstone bed rock. Leave bed rock, beats N. & S.
	Ascend 50 ft. to
26.00	Low ridge, beats N. & S.

South boundary of T. 24 S., R. 16 E.

Chains

- descend 100 ft. to  
 40.00 Set an iron post, 3 ft. long, 1 mi. in dia., 26 ins. in the ground for  $\frac{1}{4}$  sec. cor., marked on brass cap  $\frac{1}{4} S 33^{\circ}$  on N. half and  $S 4^{\circ}$  on S. half, raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high N. of cor.  
 Pits impracticable
- 62.00 Wash in hollow, 10 lks. wide, 50 ft. below  $\frac{1}{4}$  sec. cor., course NE!
- Ascend 75 ft. to  
 70.00 Spur, projects N.  
 descend.
- 72.80 West side of canyon, bears N. + S.  
 descend abruptly over ledges.  
 77.00 Base of canyon, and wash, 15 lks. wide, 150 ft. deep, course N.  
 Ascend abruptly.  
 79.00 East side of canyon, bears  $N. 15^{\circ} E.$ , and S.  
 gradually ascend over solid sandstone bed rock.
- 80.00 Point for sec. cor. on solid bed rock  
 Mark + for exact cor. point.  
 Set an iron post, 3 ft. long, 3 mis. in dia., 24 ins. in a mound of stone 4 ft. base, 2 ft. high for cor. of secs. 3, 4, 33 and 34, marked on brass cap
- $T 24 S R 16 E$  on N. half,  
 $T 25 S$  on S. half,  
 $S 33^{\circ}$  in NW.,  
 $S 34^{\circ}$  in NE.,  
 $S 3^{\circ}$  in SE. and  
 $S 4^{\circ}$  in SW. quadrant,  
 raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.  
 Pits impracticable

South boundary of T. 24 S., R. 16 E.

Chains	<p>Note: On account of natural obstacles I am unable to set post in the ground.</p> <p>Land, mountainous.</p> <p>Soil, rocky or rocky sub-soil; 4<sup>th</sup> rate</p> <p>No timber</p> <p>No Undergrowth</p> <p>Mountainous land, 8000 chs.</p>
7.00	7° 89' 59" E., bet. secs. 3 and 34 Over broken land, draining NW Gradually ascend over sandstone bedrock. Leave sandstone bed rock, bears NE. and S.
18.00	Spur, 50 ft. high, projects N. Gradually descend.
24.40	Wash, 25 eks. wide, course NW.
40.00	On north side of small wash, course SW. Set an iron post, 3 ft. long, 1 mi. in dia., 2 <sup>1</sup> / <sub>2</sub> ms. in a mound of stone, 4 ft. base, 2 ft. high for 1 <sup>1</sup> / <sub>4</sub> sec. cor., marked on bridge cap 1 <sup>1</sup> / <sub>4</sub> S 8 <sup>1</sup> / <sub>4</sub> on N. half and S 3° on S. half, raise a mound of stone, 2 ft. base; 1 <sup>1</sup> / <sub>2</sub> ft. high N. of cor. Pits impracticable
	Note: on account of natural obstacles. I am unable to set post in the ground.
52.00	Spur, 50 ft. high, projects N. Descend
54.00	Wash, 10 eks. wide, course NW. Ascend 50 ft. to
61.00	Enter gently rolling brush land bears N.E. & S.
80.00	Set an iron post, 3 ft. long, 3 ms. in dia., 2 <sup>1</sup> / <sub>4</sub> ms. in the ground for cor. of secs. 2, 3, 3 <sup>1</sup> / <sub>4</sub> and 35

## South boundary of T. 24 S., R. 16 E.

Chains

marked on brass cap  
 T 24 S R 16 E on N. half,  
 T 25 S on S. half.  
 S 34' m NW,  
 S 35' m NE,  
 S 2' m SE. and,  
 S 3' m SW. quadrant,  
 dig pits,  $18 \times 18 \times 12$  ins., in each sec.  
 $5\frac{1}{4}$  ft. dist., raise a mound of  
 earth, 4 ft. base, 2 ft. high N. of cor.  
 Land, mount anxious and level.  
 Soil, rocky and gravelly with rocky  
 and sandy sub-soil; 4<sup>th</sup> and  
 2<sup>nd</sup> rates.  
 No timber  
 Shrub growth, short shadscale.  
 Mount anxious land 61.00 chs.

- 34.00 N.  $89^{\circ} 59'$  E., bet. secs. 2 and 35  
 over gently rolling brush land.  
 Leave brush, bears N. and S.  
 thence over broken land, draining  
 SE.  
 Descend.
- 38.60 Wash, 10 lks. wide, 3 ft. deep,  
 coarse S.
- 40.00 Set an iron post, 3 ft. long, 1 in.  
 in dia., 26 ins. in the ground for  
 $\frac{1}{4}$  sec. cor., marked on brass cap  
 $\frac{1}{4}$  S 35 on N. half and S 2' on S.  
 half, raise a mound of stone, 2  
 ft. base,  $1\frac{1}{2}$  ft. high N. of cor.  
 Pits impracticable
- 43.10 Wash, 10 lks. wide, 2 ft. deep,  
 coarse SW.
- Ascend 50 ft. to
- 49.00 Ridge bears N. and S. 2 chs.  
 Descend over series of solid sand-  
 stone brushess facing SE.
- 50.00 Set an iron post, 3 ft. long, 3 ins.

South boundary of T. 24 S., R. 16 E.

Chain's	<p>in dia., 24 ins. in the ground and mound of stone for cor. of secs. 1, 2, 35 and 36, marked on brass cap  <math>T\ 24\ S\ R\ 16^{\circ}\ E.</math> on N. half,  <math>T\ 25\ S</math> on S. half,  <math>S\ 35</math> in NW,  <math>S\ 36</math> in NE,  <math>S\ 1</math> in SE and  <math>S\ 2</math> in SW. quadrant,  raise a mound of stone, 2 ft. " base,  <math>1\frac{1}{2}</math> ft. high W. of cor.  Pits impracticable</p> <p>Note: On account of natural objects I am unable to set post more than 12 ins. in the ground.</p> <p>Land, level and mountainous.</p> <p>W. 34 chs. level brush land.  Soil, sandy and gravelly with a sandy sub-soil; 1<sup>st</sup> rate. Good grass for grazing.</p> <p>E. 46 chs. Mountainous land draining SE. towards Green river. Soil, rocky on rocky sub-soil; 4<sup>th</sup> rate</p> <p>No timber</p> <p>Undergrowth, shadscale</p> <p>Mountainous land, 80.00 chs.</p>
28.25	<p>N. <math>89^{\circ} 59'</math> E., bet. secs. 1 and 36.  over mountainous land.  descend over solid sandstone bed rock.</p> <p>Edge of canyon and perpendicular sandstone ledge, bears <math>N. 60^{\circ} E.</math> and SW.</p> <p>descend abruptly into canyon, over ledges.</p>
40.00	<p>Bottom of canyon and wash, 40 lks. wide, 350 ft. below top, course <math>N. 60^{\circ} E.</math></p>

## South boundary of T. 24 S., R. 16 E

Chains

- Point for cor. in wash., no cor set.
- Ascend from canyon.
- 140.80 Set an iron post, 3 ft. long, 1 in. in dia., 26 lbs. in a mound of stone, 4 ft. base, 2 ft. high, for witness cor. to the  $\frac{1}{4}$  sec. cor., marked on brass cap T24SR16E S. 36 on N. half, T25 S R16 E S. on S. half, with W C  $\frac{1}{4}$  to the W., raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high N. of cor.  
It's impracticable  
Note: On account of natural obstacles I am unable to set post in the ground.
- 52.50 Spur, 175 ft. above canyon, projects N.E. about 6 chs. S. 3 chs is base of high sandstone ledge and wall of canyon.  
Descend abruptly 180 ft. to
- 64.00 Same canyon wash, 40 lks. wide, course SE.  
Ascend abruptly over ledges.
- 69.50 Spur, 125 ft. above wash, projects S.  
Descend abruptly over ledges.
- 74.00 Same canyon wash, 130 ft. below spur, course NE.  
Ascend 75 ft. to
- 80.00 The cor. of Ts. 24 and 25 S., Rs. 16 and 17 E.  
Land, mountainous, with a general drain to the east.  
Soil, rocky, on rocky sub-soil; H<sup>th</sup> rate.  
No timber.  
Undergrowth, some scattering shadscale.
- Mountainous land 8.00 chs.

South boundary of T. 24 S., R. 16 E.

Chavis.

October 3, 1911.

For general description see book  
of this survey.

Howard Miller

U. S. Surveyor.

## Boundaries T. 24 S., R. 16 E.

	Lines run	true bearings	Distances	Latitudes		Departures	
				N ch.s.	S ch.s.	E ch.s.	W ch.s.
N. Bdy sec 1	E $\frac{1}{2}$ r	N $89^{\circ} 57' W$	40.04	04			40.04
	W $\frac{1}{2}$ r	N $89^{\circ} 56' W$	40.23	.05			40.23
N. bdy sec 2	E $\frac{1}{2}$ r	N $89^{\circ} 58' W$	40.46	.02			40.46
	W $\frac{1}{2}$ r	N $89^{\circ} 59' W$	40.30	.01			40.30
N. bdy sec 3	E $\frac{1}{2}$ r	West	40.23				40.23
	W $\frac{1}{2}$ r	S $89^{\circ} 58' W$	40.27				40.27
N. bdy sec 4.	E $\frac{1}{2}$ r	S $89^{\circ} 58' W$	40.28			02	40.28
	W $\frac{1}{2}$ r	N $89^{\circ} 53' W$	40.33	.08			40.33
N bdy sec 5	E $\frac{1}{2}$ r	S $89^{\circ} 50' W$	40.00			.12	40.00
	W $\frac{1}{2}$ r	N $89^{\circ} 45' W$	40.28	.18			40.28
N bdy sec 6	E $\frac{1}{2}$ r	S $89^{\circ} 56' W$	40.20			40	40.20
	W $\frac{1}{2}$ r	N $89^{\circ} 37' W$	47.36	.32			47.36
W. Bdy sec 6.	N $\frac{1}{2}$ r	S $0^{\circ} 35' W$	38.30			38.30	.39
	S $\frac{1}{2}$ r	S $0^{\circ} 02' E$	40.04			40.04	.02
W. Bdy sec 7	N $\frac{1}{2}$ r	S $0^{\circ} 07' W$	40.26			40.26	.08
	S $\frac{1}{2}$ r	S $0^{\circ} 04' E$	40.10			40.10	.05
W. Bdy sec 18.	S $\frac{1}{2}$ r	S $0^{\circ} 04' E$	80.20			80.20	.09
	W. Bdy sec 19	S $0^{\circ} 12' W$	80.57			80.57	.28
W. Bdy sec 30.	S $\frac{1}{2}$ r	S $0^{\circ} 09' W$	40.13			40.13	.11
	N $\frac{1}{2}$ r	South	40.13			40.13	
W. Bdy. sec. 31	N $\frac{1}{2}$ r	S $0^{\circ} 11' W$	40.14			40.14	.13
	S $\frac{1}{2}$ r	S $0^{\circ} 30' W$	40.08			40.08	.35
S. bdy.	S $\frac{1}{2}$ r	N $89^{\circ} 59' E$	491.79	.18		491.79	
	E. bdy	North	479.80	79.80			
Convergency.							.59
Errors.				480.68	480.51	491.95	491.85
				480.51		491.85	
						.17	.10

113  
FINAL OATH OF UNITED STATES SURVEYOR.

I, \_\_\_\_\_, U.S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for \_\_\_\_\_, bearing date of the \_\_\_\_\_ day of \_\_\_\_\_, 191\_\_\_\_\_, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of \_\_\_\_\_.

For final oath of Transitman see book "G" T. 24 S., R. 16 E.

of the \_\_\_\_\_ Meridian, in the State of \_\_\_\_\_, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for \_\_\_\_\_ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said \_\_\_\_\_, and sworn to before me }  
this \_\_\_\_\_ day of \_\_\_\_\_, 191\_\_\_\_\_. }



APPROVAL.

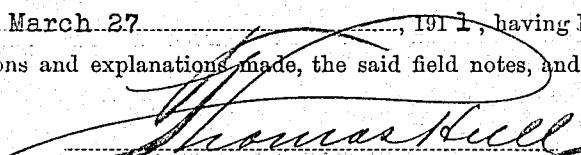
OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 14, 1914.

The foregoing field notes of the survey of the East and South Boundaries, re-tracement and resurvey of the West Boundary, and retracement of the North Boundary of Township No. 24 South, Range No. 16 East, of the Salt Lake Base and Meridian, Utah

executed by \_\_\_\_\_ Howard W. Miller

under his special instructions dated \_\_\_\_\_ March 27, 1911, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

  
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in \_\_\_\_\_, has been correctly copied from the original notes on file in this office.

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**Page**

Obs. MFY.  
Ex. G.N.

Filed Apr. 12, 1912.  
A.A.  
WSH.

4-679

Book "G"

18  
26

M.S.B.

# FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION AND MEANDERS

O.F.

T. 24 S., R. 16 E.

Of the SALT LAKE BASE AND Meridian,

In the State of UTAH

EXECUTED BY

HOWARD W. MILLER

Transitman

In the capacity of U.S. Surveyor, under instructions dated March 27, 1911,  
issued by the United States Surveyor General to govern surveys included in  
Group No. 11, which were approved by the Commissioner of the General Land  
Office, April 20, 1911, pursuant to authority contained in the Act of  
Congress dated , 1911

Survey commenced October 4, 1911

Survey completed October 23, 1911.

Subs - 60-37-65 V  
Clearings - 10-03 V  
Meanders - 13-11-03 V

6-151

# INDEX DIAGRAM.

Township 24 South Range 16 East

6	87	5	65	4	50	3	34	2	20	1
86		85		63		48		33		18
7	83	8	62	9	47	10	32	11	16	12
80		79		61		45		31		14
18	77	17	60	16	44	15	29	14	11	13
76		75		58		43		28		10
19	74	20	57	21	42	22	26	23	6	24
73		71		56		41		25		5
30	70	29	54	28	39	27	24	26	4	25
69		68		53		38		22		2
31	67	32	52	33	36	34	21	35	1	36

Meanders of Green River pages 89 to 97.

6-151

Subdivision of T. 24 S., R. 16 E.

Chains.

Survey commenced October 14, 1911  
and executed with a W. & L. E.  
Burley solar compass No. 1043.

For description and test of  
instrument see book "A" of this  
survey.

A continuous storm of rain  
during the night of October 3,  
prevented observations on Polaris.  
Abt. 7<sup>th</sup>. 49<sup>m</sup>. a.m. l.m.t., I set  
off  $38^{\circ} 41'$  on the lat. arc,  $4^{\circ} 02'$   
S., on the decl. arc, and determine  
a meridian with the solar at the  
corr. of secs. 1, 2, 35 and 36, on  
the S. bdy. of the tp. heretofore  
described.

Hence I run

$N. 0^{\circ} 01' W.$ , bet. secs. 35 and 36.  
over mountainous land.

Ascend over series of sandstone  
benches draining SE.

40.00 Set an iron post, 3 ft. long, 1 in.  
in dia., 26 in. in a mound  
of stone, 4 ft. base, 2 ft. high for  
 $\frac{1}{2}$  sec. corr., marked on brass.  
cap  $\frac{1}{4} S 35$  on W. half and  
 $S 36$  on E. half, raise a mound  
of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high  
W. of corr.

Pits impracticable.

Note: On account of natural  
obstacles, I am unable to set  
post in the ground.

40.75 Begin abrupt ascent.

46.00 Ridge, 220 ft. above sec. corr.,  
bears E. 6 chs. and W.

48.75 Same ridge, bears NW. and SE.  
Descend gradually.

60.00 Head of hollow, drains E.  
Enter sandstone bed rock.

Subdivision of T. 24 S., R. 16 E.

Chains	
	ascend.
73.00	Leave bed rock, bears E. & W.
77.00	Top of flat ridge, 75 ft. above hollow, bears E. & W.
80.00	Set an iron post, 3 ft. long, 2 in. dia., 2' 4" in. in the ground for cor. of secs. 25, 26, 35 and 36, marked on brass cap T 24 S S 26 in NW, R 16 E S 25 in NE, S 36 in SE. and S 35 in SW. quadrants, dig pits, 18 x 18 x 12 in., in each sec., 5½ ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high W. of cor.
	Land, rolling mountainous, draining East to Green river. Soil, rocky and sandy on rocky sub-soil, 4 <sup>th</sup> rate. No timber. Undergrowth, short shadscale. Some grass for grazing. Mountainous land, 80.00 chs.

Knowing that the cor. of secs. 25, 30, 31 and 36 on the E. bdy. of the tp. falls in Green river.  
Then.

N. 89° 59' E., on tree line bet. secs. 25 and 36.

Over flat ridge.

3.00 Leave ridge, bears N. & S.

Descend 75 ft. to

8.50 Head of hollow, drains N.

Ascend 75 ft. to

Same ridge, bears N. & SW.

14.50 Leave ridge, bears N. 3 chs. and S. 20° E.

Descend abruptly over ledges

Subdivision of T. 24 S., R. 16 E.

chains	
35.00	Wash and base of ridge, 125 ft. below top, course N.E. Dense over broken land.
40.00	Set an iron post, 3 ft. long, 1 in. m dia., 26 ins. in a mound of stone, 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 25 on N. half and S 36 on S. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Pt impracticable Note: On account of natural obstacles I am unable to set post in the ground
41.00	Low ridge, bears N. & S. Descend 60 ft. to
66.00	Top of perpendicular sandstone ledge, 200 ft. high and west side of Green river Canyon. Being unable to descend the ledges I will be unable to reach the right bank of river. River bears E. about 6 chs. At this point. Set an iron post, 3 ft. long, 1 in. m dia., 26 ins. in a mound of stone 4 ft. base, 2 ft. high for witness cor. to meander cor. of fract. secs. 25 and 36, marked on brass cap, T 24 S R 16 E S 25 on N. half, S 36 on S. half with W C M C to the east, raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pt impracticable Note: On account of natural obstacles I am unable to set post in the ground. Land, mountainous, draining N. Soil, rocky; on rocky sub-soil, 4 <sup>th</sup>

Subdivision of T. 24 S., R. 16 E.

Chains.	
	rate. No timber. Undergrowth, short shadscale. Mount anxious land 66.00 chs. October 4: At this cor., I set off $4^{\circ} 07' S.$ , on the decl. arc; and at $11^{\circ} 49' m.$ a.m. l.m.t., observe the sun on the meridian; the resulting lat. is $38^{\circ} 42'$
5.25	N. 0° 01' W., bet. secs. 25 and 26 over flat top ridge.
17.00	Ridge, bears E. and W. Descend abruptly. Hollow, 200 ft. deep, drains E. Ascend over solid sandstone bed rock.
33.50	Spur, 225 ft. above hollow and leave sandstone bed rock, projects E. Gradually descend over land facing nearly east.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4} S$ 26 on W. half and S 25 on E. half, raise a mound of stone, 2 ft. base, $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
42.30	Low saddle in ridge, bears N.E. + S. $80^{\circ}$ W. Descend over solid sandstone bedrock.
59.50	Ledge, 60 ft. high, bears E. + 10° descend abruptly.
63.00	Hollow, 75 ft. deep, course W. Ascend 75 ft. to
69.50	Rocky spur, projects W. Descend 100 ft. to
77.25	Mash, 10 lbs. wide, course N. $80^{\circ}$ W.
80.00	Set an iron post, 3 ft. long, 1 in.

# Subdivision of T. 24 S., R. 16 E.

chains.

iii. dia., 24 ins. in a mound of stone, 4 ft. base, 2 ft. high for cor. of secs. 23, 24, 25 and 26, marked on brass cap

T 24 S S 23 in NW,

R 16 E S 24 in NE,

S 25 in SE. and

S 26 in SW. quadrants

raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.

Pits impracticable

Note: On account of natural obstacles I am unable to set post in the ground.

Land, mountainous with a general NE. drain

Soil, rocky on rocky sub-soil;  $1\frac{1}{2}$  rate.

No timber

Undergrowth, short shale-scale.

Mountainous land 8000 chs.

Cor. situated at base of high sandstone ridge.

At 4 P.M. heavy storm of rain prevents field work this day.

The sky is overcast all night, observations on Polaris impossible

October 4, 1911.

October 5: Continuous storm of rain prevents field work this day.

October 6: At 7<sup>h</sup>. 18<sup>m</sup> a.m. l.m. 1, I set off  $38^{\circ}43'$  on the lat. arc,  $11^{\circ}19'$  S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 23, 24, 25 and 26. Thence I run

Subdivision of T. 24 S., R. 16 E.

chain	
	N. 89° 59' E., on random line bet. secs. 24 and 25
40.00	Set temporary $\frac{1}{4}$ sec. cor.
79.98	Intersect E. bdy. of the tp. at the cor. of secs. 19, 24, 25 and 30 heretofore described Hence I run S. 89° 59' W., on true line bet. secs. 24 and 25.
	Gradually ascend over solid sandstone bed rock facing E.
39.99	Set an iron post, 3 ft. long, 1 in. in dia., 26 lbs. in a mound of stone, 4 ft. base, 2 ft. high. for $\frac{1}{4}$ sec. cor., marked on brass cap. $\frac{1}{4}$ S 24 on N. half and S 25 on S. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable Note: On account of natural obstacles I am unable to set post in the ground.
	Leave sandstone bed rock, bears NW. and S.
	Hence ascend along north side of high sandstone ridge.
46.00	Skin, 100 ft. high, projects N. Enter sandstone bed rock.
	Gradually descend.
79.98	The cor. of secs. 23, 24, 25 and 26. Land mountainous with a general NE. drain. Soil, rocky on rocky sub-soil, 4 <sup>th</sup> rate. No timber. No undergrowth. Mountainous land, 79.98 chs.
	"
	N. 0° 01' W., bet. secs. 23 and 24 Gradually descend over solid

125

Subdivision of T. 24 S., R. 16 E.

chain's.

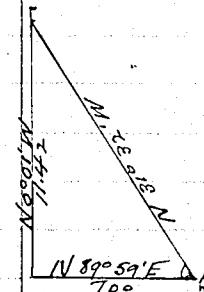
sandstone bed rock.

16.6.8 Right bank of Green river, on top sandstone ledge, 150 ft. high bears  $71.50^\circ$  E. and  $71.70^\circ$  W.  
Set an iron post, 3 ft. long, 1 in. in dia., 26 in. in a mound of stone, 4 ft. base, 2 ft. high for meander cor. of fract. secs. 23 and 24, marked on brass cap T23S R16E on N. half, M C S 24 on E. half and S 23 on W. half, raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high S. of cor.

Pit impracticable

Note: On account of natural obstacles, I am unable to set post in the ground.

To determine distance across river, I set a flag on left bank, then measure a base line  $71.89^\circ 59'$  E., 7.00 chs., to a point from which flag bears  $N. 31^\circ 32' W.$ , from the flag the east end of the base bears  $S. 31^\circ 32' E.$ , therefore  $\tan 58^\circ 29' \times \text{base} = 1.631 \times 7.00 \text{ chs.} = 11.42 \text{ chs.}$ , which added to 16.68 chs., makes



28.1.0

To left bank of Green river.

Set an iron post, 3 ft. long, 1 in. in dia., 26 in. in the ground for meander cor. of fract. secs. 23 and 24, marked on brass cap T 24 S R 1/16 E on N. half, S 24 on E. half and M C S 23 on W. half. dig pits,  $36 \times 36 \times 12$  in., N. of post, 8 ft. dist., raise a mound of earth 4 ft. base, 2 ft. high N. of cor.

Hence over level bottom land through dense willow undergrowth

Subdivision of T. 24 S., R 16 E.

chain

35.00 Leave undergrowth and bottom land

Begun ascent over solid sandstone bed rock, near west end of Boy Point.

110.00 Set an iron post. 3 ft. long, 1 in. in dia., 26 in. in a mound of stone, 4 ft. base, 2 ft. high for  $\frac{1}{4}$  sec. cor., marked on brass cap  $\frac{1}{4}$  S 23 on W. half and S 26 on E. half, raise a mound of stone 2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor. Pit impracticable

Note: on account of natural obstacles I am unable to set post in the ground.

Continue to ascend.

53.30 Top of ledge, 100 ft. high and left bank of Green River.

Set an iron post, 3 ft. long, 1 in. in dia., 26 in. in a mound of stone, 4 ft. base, 2 ft. high for meander cor. of fract. secs. 23 and 24, marked on brass cap T 24 S R 16 E. on N. half, MC S 24 on E. half, and S 23 on W. half, raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high S. of cor. Pit impracticable

Note: On account of natural obstacles, I am unable to set post in the ground.

To determine distance across river. I set a flag on line on right bank. Then measure a base line.  $71^{\circ} 59' 59''$  E., 600 chs., to a point from which flag bears  $71^{\circ} 51' 16''$  W., from the flag the east end of the base bears  $S. 31^{\circ} 46' E.$ , therefore tan  $58^{\circ} 15'$   $\times$  base or  $161 \times 600$

1512  
51:11

Subdivision of T. 24 S., R. 16 E.

chains

- Chs. = 9.70 chs., which added to  
53.30 chs., makes  
63.00 Right bank of Green river.  
Set an iron post, 3 ft. long, 1 in. in  
dia., 26 in. in the ground for  
meander cor. of fract. secs. 23  
and 24, marked on brass cap  
T 24 S R 16 E on N. half, S 24 on E.  
Half and MC S 23 on W. half,  
dig pit, 36 x 36 x 12 in., N. of post  
8 ft. dist., raise a mound of earth  
4 ft. base, 2 ft. high N. of cor.  
Begin ascent over rocky land  
facing S.
- 80.00 100 ft. above river.  
Set an iron post, 3 ft. long, 2 in.  
in dia., 24 in. in the ground for  
cor. of secs. 13, 14, 23 and 24.  
Marked on brass cap  
T 24 S S 14 in NW,  
R 16 E S 13 in NE,  
S 24 in SE, and  
S 23 in SW quadrants,  
raise a mound of stone, 2 ft.  
base, 1 1/2 ft. high W. of cor.  
Pits impracticable  
Land, mountainous with a  
general drain towards Green river.  
Soil, rocky on rocky sub-soil; 4<sup>th</sup>  
rate.  
No timber.  
Undergrowth, short shadscale  
and some willow on river  
bottom.  
Mountainous land 80.00 chs.  
October 6: At this cor. I set off  
4° 54' S., on the decl. arc; and  
at 11<sup>h</sup> 48<sup>m</sup> a.m. l.m.t., observe  
the sun on the meridian; the  
resulting lat. is. 38° 4' 3".

Subdivision of T. 24 S., R. 16 E.

S. 65° 41' E.  
 89° 59' E.  
 11.05

chain	
	N. 89° 59' E., on random line bet. secs. 13 and 24.
29.20	Right bank of Green river Set temporary meander cor. To determine distance across river I set a flag on left bank, then measure a base line N. 0° 01' W., 5 chs. dist., to a point from which flag bears S. 65° 41' E., from the flag the north end of the base bears N. 65° 41' W., therefore tan. $65^{\circ} 40' \times \text{base or } 2.21 \times 5 = 11.05 \text{ chs.}$ , which added to 29.20 chs., makes
40.25	To left. bank of Green river Set temporary meander cor. Point for $\frac{1}{4}$ sec. cor. falls in river.
80.04	Intersect E. bdy. of the township 5 lks. S. of the cor. of secs. 13, 18, 19 and 24 heretofore described Hence, I run S. 89° 57' W., on true line bet. secs.
13 and 24	Over broken rocky land.
2.00	Begui gradual descent towards Green river.
35.00	Top of ledge, 125 ft. high, bears N. & S descend abruptly.
37.00	Base of ledge. Hence over bottom land, through dense willow undergrowth.
39.79	Left bank of Green river. Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for meander cor. of fract. secs. 13 and 24, marked on brass cap T 24 S R 16 E M C S 13 on N. half and S 24 on S. half, dig pit, $36 \times 36 \times 12$ ins. E. of post, 8 ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high E. of

Subdivision of T. 24 S., R. 16 E.

chains	
	cor.
40.02	Ponit for $\frac{1}{4}$ sec. cor. falls in Green river. No cor. established.
50.84	Right bank of Green river. Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for meander cor. of fract. secs. 13 and 24, marked on brass cap, T 24 S R 16 E S 13° on N. half and S 24 M C on S. half, dug pit, 36 x 36 x 12 ins., W. of post, 8 ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high W. of cor. Ascend abruptly over ledges.
57.00	Top of steep ascent, 100 ft. above river, bears N. + S. Thence over broken land facing S.
72.00	South, 1 ch. is a solid sandstone knoll, 70 ft. high.
75.00	Wash, 15 lks. wide, 2 ft. deep, coarse S. Ascend.
80.04	The cor. of secs. 13, 14, 23 and 24. Land, mountainous, draining towards Green river. Soil, rocky on rocky sub-soil, 4 <sup>th</sup> rate. No timber.
	Undergrowth, dense willow on river bottom.
	Mountainous land, 8004 chs.
	N. 0° 01' W., bet. secs. 13 and 14. Over mountainous land. Ascend abruptly over ledges.
0.70	Top 50 ft. ledge, bears N.E. + S. 65° W. Gradually ascend over solid sandstone bed rock.

Subdivision of T. 24 S., R. 16 E.

chains.

- 140.00 Set an iron post. 3 ft. long. 1 mi.  
in dia., 26 ins. in a mound of  
stone, 4 ft. base, 2 ft. high for  $\frac{1}{4}$   
sec. cor., marked on brass cap  
 $\frac{1}{4} S 14$  on W. half and  $S 13$  on  
E. half, raise a mound of stone  
2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.  
Pits impracticable  
Note: on account of natural  
obstacles, I am unable to set post,  
in the ground.
- 145.00 Low ridge, bears E. & W.  
Gradually descend 75 ft. to.
- 155.00 Leave sandstone bedrock, bears  
E. & W. and hollow, drains E.  
Ascend 75 ft. to
- 166.25 Enter bench, bears E. & W.
- 171.00 Leave bench, bears E. & W.  
Descend abruptly over ledges  
into canyon.
- 174.00 Bottom of canyon, 125 ft. deep,  
course E.
- 180.00 Ascend abruptly.
- 180.00 100 ft. above bottom of canyon.  
Set an iron post, 3 ft. long. 2 mi.  
in dia., 24 ins. in a mound of  
stone, 4 ft. base, 2 ft. high for cor.  
of secs. 11, 12, 13 and 14, marked  
on brass cap  
T 24 S 8 11 mi NW,  
R 16 E S 12 mi NE,  
 $S 13$  in SE. and  
 $S 14$  in SW. quadrant,  
raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high W. of cor.  
Pits impracticable  
Note: On account of natural  
obstacles, I am unable to set  
post in the ground.  
Land, moltenaneous with a

# Subdivision of T. 24 S., R. 16 E.

Chain

general, easterly drain.  
Soil, rocky on rocky sub-soil;  
 $4^{\text{th}}$  rate.  
No timber  
No Undergrowth.  
Mountainous land 8000 ft.

At a point 2 chs. N. 0° 0' W. of the  
cov. of secs. 11, 12, 13 and 14 in lat-  
itude  $38^{\circ} 44' 17''$  N., longitude  $110^{\circ}$   
 $08' 25''$  W., I set off  $38^{\circ} 44'$  on the  
lat. arc;  $4^{\circ} 56'$  S., on the decl. arc;  
and at  $4^{\text{h}} 18^{\text{m}}$  p. m. l. m. t.,  
determine a meridian with the  
solar and mark a point thereof,  
by a cross on a stone, firmly  
set, 5 chs. N. of my station.  
At  $6^{\text{h}} 35^{\text{m}}$  p. m. by my watch  
which carries correct l. m. t., I  
observe Polaris at eastern  
elongation in accordance with  
the Manual of Instructions and  
mark a point in the line thus  
determined, on a peg driven in  
the ground 5 chs. N. of my  
station

October 6, 1911

October 7: At  $7^{\text{h}} 48^{\text{m}}$  a.m. l. m. t.,  
I lay off the azimuth of Polaris  
 $1^{\circ} 30'$  to the west, and find that  
the Polaris meridian agrees  
with the solar meridian of Oct.  
6.

At  $8^{\text{h}} 03^{\text{m}}$  a.m. l. m. t., I set off  
 $38^{\circ} 44'$  on the lat. arc;  $5^{\circ} 12'$  S.,  
on the decl. arc; and mark a  
point in the meridian deter-  
mined with the solar by cutting  
a small groove in the stone.

Subdivision of T. & S. R. 16 E.

chains

already set 5 chs. N. of my station, which meridian, falls  $0.4$  ms. E. of the meridian established by the Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridians, respectively, which agree and  $0' 21''$  E. of the Polaris meridian. The atmosphere at this hour is rather hazy which probably is the cause of the instrument varying from the Polaris meridian, therefore, I conclude that the instrument is in perfect adjustment.

The magnetic bearing of the true meridian at  $8^h 15^m$  a.m. is  $N. 15^\circ 15' W.$ , the angle thus determined gives the mag. decl.  $15^\circ 15' E.$

From the cor. of secs. 11, 12, 13 + 14 I run

$N. 89^\circ 57' E.$ , on random line bet. secs. 12 and 13

4.38 Right bank of Green river.  
Set temporary meander cor.  
To determine distance across river  
Erect a signal at this point, I then place my transit on line on left bank and measure a base line  $7.0^\circ 03' W.$ , 500 chs., to a point from which flag bears  $S. 67^\circ 42' W.$ , the base subtends an angle of  $67^\circ 45'$  to the flag, therefore, tan  $67^\circ 45' \times$  base or  $2.445 \times 5 = 12.22$  chs., which added to 4.38 chs., makes

16.60 To left bank of Green river,

Set temporary meander cor.

40.00 Set temporary  $\frac{1}{4}$  sec. cor.

80.10 Intersect E. bdy. of the tr. 3 lks. N.

S. 67° 42' W. 67° 45'

500 chs.

12.22

500 chs.

Subdivision of T. 24 S., R. 16 E.

chains

- of the cor. of secs. 7, 12, 13 and 18  
heretofore described.  
Hence I run  
S.  $89^{\circ} 58'$  W., on true line bet. secs.  
12 and 13.  
Over hilly land.  
Hollow, 15 ft. deep, drains NW.  
Ascend 75 ft. to  
28.00 Ridge, bears N.  $35^{\circ}$  E. and S.  $35^{\circ}$  W.  
Descend 50 ft. to  
33.00 Head of hollow, drains N.  
Ascend 30 ft. to  
36.50 Spur, projects N.  
Descend.  
40.05 Set an iron post, 3 ft. long, 1 in.  
in dia., 26 ins. in the ground  
for  $\frac{1}{4}$  sec. cor., marked on brass  
Cap  $\frac{1}{4}$  S 12 on N. half and S 13  
on S. half, raise a mound of  
stone 2 ft. base,  $1\frac{1}{2}$  ft. high N. of  
cor.  
Pits impracticable  
47.00 Enter sandstone bed rock, bears NW. & SE.  
Descend abruptly  
57.75 Wash, 25 ft. wide, 125 ft. below spur.  
course N.  $35^{\circ}$  W.  
Leave bed rock, ascend abruptly.  
62.00 Ridge, 75 ft. high, bears N. 7 chs + S.  
Descend.  
63.50 Left bank of Green river.  
Set an iron post, 3 ft. long, 1 in. in  
dia., 26 ins. in the ground for  
meander cor. of fract. secs. 12 and  
13, marked on brass cap T. 24 S<sup>E</sup> R 16  
E M C S 12 on N. half and S 13 on S.  
half, dig pit, 36 x 36 x 12 ins. E. of  
post, 8 ft. dist., raise a mound of  
earth, 4 ft. base, 2 ft. high E. of cor.  
Right bank of Green river and top  
of ledge 80 ft. high

Subdivision of T. 24 S., R. 16 E.

chains

Set an iron post, 3 ft. long, 1 mi. in dia., 26 ins. in a mound of stone 4 ft. base, 2 ft. high for meander cor. of fract. secs. 12 and 13, marked on brass cap T 24 S R 16 E S 1/2 on N. half and S 1/2 M. C on S. half, raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.

Pit impracticable.

Note: On account of natural obstacles I am unable to set post in the ground.

Thence over land facing S.

80.10 The cor. of secs. 11, 12, 13 and 14.

Land, mountainous

Soil, rocky on rocky sub-soil, 4<sup>th</sup> rate.

No timber

Undergrowth, some short shade cast

Mountainous land 80.10 chs

N. 0° 0' W., bet. secs. 11 and 12.

Over mountainous land

Ascend 25 ft. to

1.50 Top of N. side of canyon, bears N. E. SW.

Gradually ascend.

15.50 Spur, 75 ft. high, projects E.

Enter sandstone bed rocks, bears E. & W.

Descend 125 ft. to

40.00 Set an iron post, 3 ft. long, 1 mi. in dia., 26 ins. in a mound of stone 4 ft. base, 2 ft. high for  $\frac{1}{4}$  sec. cor., marked on brass cap  $\frac{1}{4} S 1/2$  on W. half and S 1/2 on E. half, raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.

Pit impracticable

Note: On account of natural objects

Subdivision of T. 24 S., R. 16 E.

Chains.	I am unable to set post in the ground.
56.50	Wash, 15 lks. wide, 3 ft. deep, course SE. Leave bed rock, ascend.
71.60	Top of sandstone knoll, 50 ft. high, on spur, projects E. Descend 75 ft. to
75.25	Wash, 10 lks. wide, 1 ft. deep, coarse E. Ascend.
78.50	Base of sandstone ledge, 110 ft. high brass NE. and SW.. Ascend
78.75	Top of ledge, brass NE. & SW. Hence over sandstone bed rock.
80.00	Point for sec. cor. falls on solid bed rock, mark + for exact cor. point. Set an iron post, 3 ft. long, 2 in. in dia., 24 in. in a mound of stone 4 ft. base, 2 ft. high for cor. by secs. 1, 2, 11 and 12, marked on brass cap
	T 24 S <sup>o</sup> S <sup>o</sup> 2 mi NW, R 16 E S 1 mi NE, S 1 1/2 mi SE. and S 1 1/2 mi SW. quadrants raise a mound of stone, 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable
	Note: On account of natural obstacles I am unable to set post in the ground. Land, mountainous with a general east slope and drain. Soil, rocky on rocky sub-soil; 4 <sup>th</sup> rate. No timber. No Undergrowth.
	October 7: At this sec. cor., I set

Subdivision of T. 24 S., R. 16 E.

chains

off  $5^{\circ} 17'$  S. on the decl. arc; and  
at  $11^{\text{h}} 48^{\text{m}}$  a. m. l. m. t., observe  
the sun on the meridian; the  
resulting lat. is  $38^{\circ} 45'$ .

N.  $89^{\circ} 58'$  E., on random line bet.  
secs. 1 and 12.

40.00 Set temporary  $\frac{1}{4}$  sec. cor.  
51.15 Right bank of Green river.  
Set temporary meander cor.  
To determine distance across  
river, I set a flag on line on left  
bank, then measure a base line,  
 $S. 0^{\circ} 02' E.$ , 4.50 chs., to a point from  
which flag bears N.  $58^{\circ} 04' E.$ ,  
from the flag the south end of  
the base bears  $S. 58^{\circ} 04' W.$ , there-  
fore tan  $58^{\circ} 06' \times$  base or  $1.606 \times 4.$   
50 chs. = 7.23 chs., which added  
to 51.15 chs. makes

58.38 To left bank of Green river.

Set temporary meander cor.

80.03 Intersect E. bdy. of the tp. 9 lks. N.  
of the cor. of secs. 1, 6, 7 and 12  
heretofore described

Thence 9 run

N.  $89^{\circ} 58' W.$ , on true line bet. secs.  
1 and 12.

Over rolling land, draining NW.  
Top of ledge, 50 ft. high, bears  
NE. and SW.

descend

11.00 Base of ledge.

Thence over level bottom land.

21.65 Left bank of Green river.

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for  
meander cor. of fract. secs. 1 and  
12, marked on brass cap T 24 S. R 16  
E M C S' on N. half and S 12' on

N.  $89^{\circ} 58' E$   
7.23  
N.  $58^{\circ} 04' E$   
06

Subdivision of T. 24 S., R. 16 E.

chains	S. half, dig pit, $36 \times 36 \times 12$ ins., E. of post, 8 ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high E. of cor.
28.88	Right bank of Green river Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for meander cor. of fract. secs. 1 and 12, marked on brass cap T 24 S R 16 E S $\frac{1}{4}$ on N. half and S $\frac{1}{2}$ M $\frac{1}{4}$ on S. half, dig pit, $36 \times 36 \times 12$ ins., W. of post, 8 ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high W. of cor. Ascend abruptly.
30.80	Top of 50 ft. ledge, bears N. $15^{\circ}$ E., and S. $25^{\circ}$ W. Hence over broken land.
40.01 $\frac{1}{2}$	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S $\frac{1}{4}$ on N. half and S $\frac{1}{2}$ on S. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable
63.25	Top of solid sandstone spur, 25 ft. high, projects S. 50 lks. Descend 35 ft. to
65.00	Wash, 10 lks. wide, coarse S. Ascend 30 ft. to
69.40	South point of sandstone spur, projects S. 50 lks. Descend.
72.00	Wash, 15 lks. wide, coarse S.
79.10	Base of 100 ft. ledge, bears NE. and SW. Ascend abruptly.
79.20	Top of ledge, bears NE. & SW.

Subdivision of T. 24 S., R. 16 E.

Chains.	
80.03	Thence over sandstone bed rock. The cor. of secs. 1, 2, 11 and 12. Land, mountainous and rolling. Soil, rocky and gravelly on rocky sub soil; 2 <sup>nd</sup> and 4 <sup>th</sup> rates No timber Undergrowth, shadscale. Mountainous land, 51.15 cha.
79.89	N. 0° 0' W., on random line bet. secs. 1 and 2
40.00	Set temporary $\frac{1}{4}$ sec. cor.
79.89	Intersect N. bdy. of the tp. 26 lks. S. 89° 56' E., of the cor. of secs. 1, 2, 35 and 36, heretofore described. Thence I run S. 0° 12' E., on true line bet. secs., 1 and 2.
	Over hilly land Ascend 25 ft. to
6.00	Low spur, projects E. Gradually descend.
16.40	Wash, 40 lks. wide, course N.E. road in wash, bears N.E. and S.E.
39.89	Set an iron post, 3 ft. long, 1 in. in dia., 26 lbs. in a mound of stone, 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 2' on W. half and S 1' on E. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Post impracticable Note: on account of natural obstacles, I am unable to set post in the ground.
47.00	Wash, 10 lks. wide, course N.W.
49.00	Ascend abruptly over sandstone spur, bears E. & N.W.
50.50	Spur, 75 ft. high, projects N.W. Descend abruptly

Subdivision of T. 24 S., R. 16 E.

chain.	
52.00	Base of spur, 75 ft. below top, bears E. & W.
57.00	Mash, 15 lks. wide, course NW.
61.00	Base sandstone spur, bears W. and NE.
63.25	Ascend abruptly 100 ft. to top spur, projects W.
	Descend abruptly 100 ft. to
66.50	Base of spur, bears W. & SE. Hence along west edge of ledge.
73.50	Base of sandstone ridge, bears NE. and SW.
	Ascend 100 ft. to
79.00	Ridge, bears NE. and SW.
	Descend 10 ft. to
79.89	The cor. of secs. 1, 2, 11 and 12. Laud, Mount airous with a general, N. drain. Soil, gravelly and rocky on rocky sub-soil; 4 <sup>th</sup> rate No timber Undergrowth, short shadscale Mount airous laud 79.89 chs.
	October 7, 1911.

October 8: At 7<sup>h</sup>. 48<sup>m</sup> a.m. l.m.t., I set off  $38^{\circ} 41'$  on the lat. arc,  $5^{\circ} 35'$  S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 2, 3, 34 and 35 on the S. Ody. of the tp. heretofore described.

Hence I run

N.  $0^{\circ} 01'$  W., bet. secs. 34 and 35

Over gently rolling brush

10.50 Rear branch, bears NE. and SW.  
Descend over broken land.

22.30 Mash, 20 lks. wide, 2 ft. deep,  
course NW.

36.00 Mash, 10 lks. wide, 1 ft. deep,

Subdivision of T. 24 S., R. 16 E.

chains.

	course NW.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 mis. in the ground for 1/4 sec. cor., marked on brass cap 1/4 S 34' on W. half and S 35' on E. half, raise a mound of stone, 2 ft base, 1 1/2 ft. high W. of cor. Pits impracticable
43.25	Wash, 10 lks. wide, 2 ft. deep, course W.
57.50	Wash, 15 lks. wide, 3 ft. deep, course NW.
80.00	Set an iron post, 3 ft. long, 2 mis. in dia., 24 mis. in the ground and mound of stone, 4 ft. base, 1 ft. high for cor. of secs. 26, 27, 34, and 35 marked on brass cap  T 24 S S 27 in NW, R 16 E S 26 in NE, S 35 in SE. and S 34 in SW. quadrants, raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor. Pits impracticable Note: On account of natural obstacles, I am unable to set post over 12 mis. in the ground. Land, gently rolling and hilly. Soil, gravelly, sandy and rocky, on rocky sub soil; 4 <sup>th</sup> rate. No timber. Undergrowth, short shadscale. Good grass for grazing on S 10. 50 chs.
40.00	N. 89° 59' E., on random line bet. secs. 26 and 35. Set temporary 1/4 sec. cor.

Subdivision of T. 24 S., R. 16 E.

chain	
80.01	Intersect the cor. of secs. 25, 26, 35 and 36. Hence 3' run $S. 89^{\circ} 57' W.$ , on true line bet. secs. 26 and 35. Over flat ridge
2.00	Leave ridge, bears NW. and SE. Descend 75 ft. to
7.00	Head of hollow, drains S. Ascend 75 ft. to
10:00	Same ridge, bears NE. and SW. Gradually descend across ridge.
33.00	Enter sandstone bed rock, bears N. and S.
38.00	Top of ledge 50 ft. high, bears N. and S. Leave bed rock. Descend.
40.00	100 ft. below ledge. Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4} S 26$ on N. half and $S 35$ on S. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. It is impracticable.
58.00	Wash, 20 lks. wide, course N. 8 chs. thence NW. Ascend 75 ft. to
66.00	Ridge, bears NW. and SE. Descend 75 ft. to
76.25	Wash, 20 lks. wide, 3 ft. deep, course NW. Ascend 50 ft. to
78.25	Low ridge, bears N. & S. Gradually descend.
80.01	The cor. of secs. 26, 27, 34, and 35. Land mountainous, with a

Subdivision of T. 24<sup>th</sup> S., R. 16 E.

chains	<p>general NW. drain.      Soil, gravelly and rocky on      rocky sub-soil, 4<sup>th</sup> rate      No timber.      Undergrowth short shadescale.      Mountainous land, 80.01 chs.</p>
	<p>N. 0° 0' W., bet. secs. 26 and 27.      Over hilly land draining NW.      Descend 30 ft. to      Wash, 25 lks. wide, 3 ft. deep,      course NW.</p>
5.00	<p>Ascend 40 ft. to      Ridge, bears E. and W.      Descend 25 ft. to      Wash, 15 lks. wide, course NW.</p>
14.25	<p>Ascend 50 ft. to      Ridge, bears N. 30° W. and SE.      Descend 50 ft. to</p>
21.00	<p>Set an iron post, 3 ft. long, 1 in.      in dia., 26 ins. in a mound of      stone, 4 ft. base, 2 ft. high for      sec. cor., marked on brass cap  <math>\frac{1}{4} S 27</math> on W. half and <math>S 26</math> on      E. half, raise a mound of stone,      2 ft. base, <math>\frac{1}{2}</math> ft. high W. of cor.      Pits impracticable</p>
	<p>Note: On account of natural      obstacles I am unable to set      post in the ground.</p>
48.00	<p>Wash, 20 lks. wide, 1 ft. deep,      course NW.</p>
55.00	<p>Enter solid sandstone bed rock,      bears E. and SW.      Gradually descend.</p>
80.00	<p>Set an iron post, 3 ft. long, 2 ins.      in dia., 24 ins. in a mound      of stone, 4 ft. base, 2 ft. high for      cor. of secs. 22, 23, 26 and 27,      marked on brass cap</p>

Subdivision of T. 24 S., R. 16 E.

Chains.

T. 24 S. S. 22 mi NW,  
 R. 16 E S<sup>o</sup> 23 mi NE,  
 S<sup>o</sup> 26 mi SE. and  
 S<sup>o</sup> 27 mi SW. quadrants  
 raise a mound of stone, 2 ft.  
 base,  $1\frac{1}{2}$  ft. high W. of cor.  
 Pits impracticable

Note: On account of natural  
 obstacles I am unable to set  
 post in the ground.  
 Land hilly.

Soil, rocky on rocky sub-soil;  
 4<sup>th</sup> rate

No timber

Undergrowth, short shadscale.

October 8: At this sec. cor. I set  
 off  $5^{\circ} 40'$  S., on the decl. arc;  
 and at 11<sup>h</sup>. 48<sup>m</sup>. a.m. l.m.t.,  
 observe the sun on the meridian,  
 the resulting lat. is  $38^{\circ} 43'$

$77.89^{\circ} 59' E.$ , on random line bet. secs  
 23 and 26.

40.00 Set temporary N. sec. cor.

Intersect N. & S. line 3 lks. N. of the  
 cor. of secs. 23, 24, 25 and 26.

Hence I run

West, on true line bet. secs. 23 and  
 26.

over broken land draining N.,  
 across solid sandstone bed rock.

15.50 Wash, 25 lks. wide, 5 ft. deep,  
 course N.

Ascend 30 ft. to

20.00 Low ridge, bears N. and S.  
 gradually descend.

39.98% Set an iron post, 3 ft. long, 1 in. m  
 dia., 26 in. in a mound of stone,  
 4 ft. base, 2 ft. high for  $\frac{1}{4}$  sec. cor.,  
 marked on brass cap  $\frac{1}{4} S 23$  on N.

Subdivision of T. 24 S., R. 16 E.

	chains	<p>and S 26 on S. half, raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high N. of cor. Pits impracticable.</p> <p>Note: On account of natural obstacles I am unable to set post in the ground.</p>
62.25		<p>Wash, 25 eks. wide, 1 ft. deep, course NW.</p>
79.97		<p>The cor. of secs. 22, 23, 26 and 27. Ravd, rolling with a general N. drain Soil, rocky on rocky sub-soil; 4<sup>th</sup> rate. No timber No Undergrowth</p>
		October 8, 1911

October 9: At 7<sup>h</sup>. 48<sup>m</sup> a.m. l.m.t., I set off  $38^{\circ} 43'$  on the lat. arc,  $5^{\circ} 58'$  S., on the decl. arc, and determine a meridian with the solar at the cor. of secs. 22, 23, 26 and 27.

Thence I run

N.  $0^{\circ} 01'$  W., bet. secs. 22 and 23.

Gradually descend over solid sandstone bed rock.

20.50 South side of Three canyons, and vertical sandstone ledges 200 ft. high down which I cannot climb. To determine distance across canyon, I set a flag on line on N. side, then measure a base, N.  $89^{\circ} 59'$  E., 6.00 chs., to a point from which flag bears N.  $35^{\circ} 15'$  W. from the flag the east end of the base bears S.  $35^{\circ} 15'E.$ , therefore tan.  $54^{\circ} 44.6' \times$  base or  $1.4158 \times 6$  chs. =

189°59'E  
60°  
54°44.6'

Subdivision of T. 24 S<sup>o</sup>, R. 16 E.

Chains.	
28.99	8.49 chs., which added to 20.50 chs., makes to north side of canyon, 300 ft. dep, bears N. 70° E. and S. 70° W. Gradually ascend over solid sandstone bed rock.
40.00	Set an iron post, 3 ft. long, 1 mi. in dia., 26 ins. in a mound of stone, 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 22' on W. half and S 23' on E. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable Note: On account of natural obstacles, I am unable to set post in the ground.
51.00	Leave sandstone bed rock, bears E. and W.
72.00	Ridge spur, projects SW. Descend 50 ft. to
76.50	Hollow, drains W.
80.00	Ascend 30 ft. to On low spur, projects NW. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins in a mound of stone 4 ft. base, 2 ft. high for cor. of secs. 14, 15, 22 and 23, marked on brass cap T 24 S <sup>o</sup> 15 m NW, R 16 E S <sup>o</sup> 14 m NE, S 23' m SE and S 22' m SW quadrants raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable Note: On account of natural obstacles I am unable to set post in the ground.

Subdivision of T. 24 S., R. 16 E.

Chains	
	Land, broken mountainous. Soil, rocky on rocky sub-soil, $\frac{4}{4}$ th rate. No timber No Undergrowth.
	East, on random line bet. secs. 14 and 23.
40.00	Set temporary $\frac{1}{4}$ sec. cor.
79.98	Intersect N. + S. line 5 lks. S. of the cor. of secs. 13, 14, 23 and 24 Hence I run $S.89^{\circ}58'W.$ , on true line bet. secs. 14 and 23.
	Over mountainous land at base of ledge.
12.40	Ascend abruptly over ledge.
12.75	Top of 75 ft. ledge, bears E. and $S. 35^{\circ} W.$ Hence ascend over solid sandstone bed rock.
39.99	Set an iron post, 3 ft. long, 1 in. mi- dia., 26 lbs. in a mound of stone, 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., marked on Brass cap $\frac{1}{4} S 14$ on N. half and $S 23$ on S. half, raise a mound of stone & ft. base, $1\frac{1}{2}$ ft. high N. of cor. Post impracticable, Note: On account of natural obstacles, I am unable to set post in the ground.
49.25	Base of ridge bears N. + S. Ascend abruptly over ledges.
51.00	Top of narrow sandstone ridge, 150 ft. above sec. cor., bears N. and S. Descend 75 ft. to
64.00	Gulch, drains SW.
67.00	Ascend 60 ft. to Sandstone spur, projects SW

Subdivision of T. 24 S., R. 16 E.

Chains

	Leave solid sandstone bed rock. Descend along spur.
79.98	The cor. of secs. 14, 15, 22 + 23. Land, mountainous with a general S. drain. Soil, rocky on rocky sub-soil, $4^{\text{th}}$ rate. No timber. No undergrowth. Mountainous land. 79.98 chs. October 9: At this sec. cor., I set off $6^{\circ} 02' S.$ , on the decl. arc; and at $11^{\text{h}} 48^{\text{m}}$ a.m. l.m.t., observe the sun on the meridian; the resulting lat. is $38^{\circ} 43'$ .
6.75	$7^{\circ} 0^{\circ} 01' W.$ , bet. secs. 14 and 15 over mountainous land near base of high sandstone ridge Descend 25 ft. to Wash in hollow, 25 lks. wide, course W. Ascend abruptly over sandstone ledges, bears E. + W.
20.75	Sandstone spur, 200 ft. high, projects E. a chs. Descend 75 ft. to
26.00	Head of hollow, drains SE. Ascend 75 ft. to
30.00	Sandstone ridge, bears E. + W. Descend abruptly over ledges.
35.50	Base of ledges, 225 ft. below top, bears E. and W. Head of wash drains NE. Gradually descend
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 2 1/2 ins. in a mound of stone, 4 ft. base, 2 ft. high for 1/4 sec. cor., marked on brace, cap 1/4 S 15 on W. half and S 14

Subdivision of T. 24 S., R. 16 E.

Chancos

- on E. half, raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.
- Pits impracticable
- Note: On account of natural obstacles, I am unable to set post in the ground.
- 14.75 Same wash, 10 lks. wide, course NW.
- 17.50 Wash, 15 lks. wide, 1 ft. deep, course W.  
Ascend 50 ft. to
- 54.25 Spur projects W.  
Gradually descend.
- 75.00 Wagon road. bears NE. and SW.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground and mound of stone for cor. of secs. 10, 11, 14 and 15, marked on brass cap
- T 24 S 8 1/2 m NW,  
R 16 E S 11 m NE,  
S 14 m SE. and  
S 15 m SW. quadrants,  
dig pits,  $18 \times 18 \times 12$  ins., in each sec.,  $5\frac{1}{2}$  ft. dist.; raise a mound of earth, 4 ft. base, 2 ft. high W. of cor.
- Note: On account of natural obstacles I am unable to set post more than 12 ins. in the ground. Land, mountainous and rolling with a general drain to the W. Soil, rocky on rocky sub-soil, 4<sup>th</sup> rate.
- No timber
- Undergrowth some scattering shadscale.
- Mountainous land, 54 v 5 che.

October 9, 1911

Subdivision of T. 24 S., R. 16 E.

Chains

	October 10: At 7 h. 47 m. a.m. l.m.t., I set off $38^{\circ} 44'$ on the lat. arc; $6^{\circ} 21' S.$ , on the decl. arc, and determine a meridian with the solar at the cor. of secs. 10, 11, 14 and 15. Hence I run $71.89^{\circ} 58' E.$ , on random line bet. secs. 11 + 14
40.00	Set temporary $\frac{1}{4}$ sec. cor.
79.96	Intersect $71.5 S.$ line 3 lks. N. of the cor. of secs. 11, 12, 13 and 14. Hence I run $51.89^{\circ} 59' W.$ , on true line bet. secs. 11 and 14.
	Over mountainous land.
1.00	Ascend Top of canyon, bears N.E. & S.W.
	Gradually ascend towards high sandstone ridge
26.00	Base of sandstone ridge, bears N. and S.
	Ascend abruptly over ledges.
34.00	Top of ridge, 200 ft. above sec. cor. Bears N. & S.
	Descend abruptly over ledges.
38.00	Base of ledges, bears N. & S.
	Continue to descend.
39.25	Wash, 10 lks. wide, 175 ft. below ridge, course N.: Ascend.
39.98	Set an iron post, 3 ft. long, 1 in. in dia., 26 in. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4} S 11$ on N. half and $S 14$ on S. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. It's impracticable
42.00	Spur, projects N.E. and base of high sandstone ledge

Subdivision of T. 34 S., R. 16 E.

Chains	
51.60	Wash, 20 lks. wide, 2 ft. deep, course NW. Thence over rolling land
54.00	Wash, 20 lks. wide, 1 ft. deep, course N. 35° W.
73.75	Wash, 25 lks. wide, 1 ft. deep, course NW.
77.25	Wagon road, bears NE. and SW.
79.96	The cor. of secs., 10, 11, 14 and 15 Land, mountainous and rolling, draining E. on E. 34 chs. and NW. on W 45.96 chs. Soil, rocky on rocky sub-soil; 4 <sup>th</sup> rate.
	No timber
	Undergrowth, some short shadscale.
	Mountainous land, 34 chs.
7.00	N. 0° 01' W., bet. secs. 10 and 11. Gradually descend over rolling land
18.75	Wash, 25 lks. wide, 1 ft. deep, course NW.
24.50	Same wash, course N. 30° E.
.	Wash, 25 lks. wide, 1 ft. deep, course W. 6 chs., thence NW. Enter mountainous land, bears E. and W.
	Ascend.
25.50	New road, bears NW. and E.
34.50	East side of knoll on spur, projects W.
.	Descend 30 ft. to
36.50	Wash, 10 lks. wide, 1 ft. deep, course W.
	Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 in. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap

Subdivision of T. 24 S., R. 16 E.

Chains	
	1/4 S 10' on W. half and S 11' on E. half. raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor. Pits impracticable
48.00	Spur, 60 ft. high, projects NW. Descend.
57.00	Wash, 10 lks. wide, 1 ft. deep, course W. Ascend 50 ft. to
80.00	Ridge, bears NW. and SE. Set an iron post, 3 ft. long, 2 in. in dia., 24 ins. in the ground for cor. of secs. 2, 3, 10 and 11, marked on brass cap T 24 S S 3 mi NW, R 16 E S 2 m NE, S 11 m SE. and S 10 m SW. quadrants dig pits, 18 x 18 x 1/2 ins, in each sec., 5 1/2 ft. dist.; raise a mound of earth, 4 ft. base, 2 ft. high W. of cor. Land, mountainous and rolling, draining W. Soil, gravelly and rocky on rocky sub soil; 4 <sup>th</sup> rate. No timber Undergrowth, short shadscale. Mountainous land 55.50 chs. October 10: At this sec. cor. I set off 6° 25' S. on the decl. arc, and at 11 <sup>h</sup> . 47 <sup>m</sup> . a.m. l.m.t., observe the sun on the meridian; the resulting lat. is 38° 45'
40.00	N. 89° 59' E., on random line bet. secs. 2 and 11. Set temporary 1/4 sec. cor. Intersect N. & S. line 9 lks. S. of the cor. of secs. 1, 2, 11 and 12. Hence I run
79.85	

Subdivision of T. 24 S., R. 16 E.

chain	S. $89^{\circ} 55' W.$ , on true line bet. secs. 2 and 11. Over mountainous land. Ascend over solid sandstone bed-rock.
3.75	Sandstone ridge, bears N.E. and S. $30^{\circ} W.$ Descend abruptly 125 ft. to
6.00	Base sandstone ridge, bears N. & S. Gradually descend.
30.00	Wash, 20 lks. wide, 5 ft. deep, course N. 6 chs., thence N.E. Road in wash, bears N. & S. Ascend.
39.92 $\frac{1}{4}$	Set an iron post. 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S. $2^{\circ}$ on N. half and S. $11^{\circ}$ on S. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
	Pits impracticable
43.00	Ridge, 50 ft. high, bears N. $30^{\circ} E.$ and S. $30^{\circ} W.$ Descend 75 ft. to
63.25	Wash, 10 lks. wide, 2 ft. deep, course N.
68.75	Wash, 10 lks. wide, 2 ft. deep, course N. $30^{\circ} E.$ Ascend 50 ft. to
79.85	The cor. of secs. 2, 3, 10 and 11. Land, mountainous with a general N. drain. Soil, gravelly and rocky on rocky sub-soil; $4^{th}$ rate. No timber Undergrowth, some short shadscale.
	Mountainous land on 79.85 chs.

Having retraced the N. bdy. of the

Subdivision of T. 24 S., R. 16 E.

Chains.

	Up and knowing that closing corr. will be necessary upon it, I run.
	N. 0° 01' W., on true line bet. secs. 2 and 3.
	Over hilly land.
4.00	East side of knoll on ridge, bears SW. and NW.
	Descend 75 ft. to
36.00	Wash, 15 ells. wide, 3 ft. deep, course NW. 8 chs. thence N.
	Ascend
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 2 <sup>1</sup> / <sub>2</sub> ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 3 on W. half and S 2 on E. half, raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
	Pits impracticable
46.00	Spur, 50 ft. high, projects NW.
	Descend 50 ft. to
49.75	Wash, 15 ells. wide, 2 ft. deep. course NW.
	Ascend 50 ft. to
53.00	Ridge, bears NW. and SE.
	Descend.
65.00	Base of hilly land, bears E. & W. Enter dense greasewood undergrowth and bottom land of San Rafael river.
77.25	Right bank San Rafael river, course S. 80° E.
	Thence across nearly dry channel of stream.
79.50	Left bank of river, course S. 80° E.
79.90	Intersect N. bdy. of the tp., 1.20 chs. S. 89° 59' E., of the cor. of secs. 4, 5, 32 and 33 Leftright described. Set an iron post, 3 ft. long, 2 ins.

Subdivision of T. 24 S., R. 16 E.

chains

in dia., 24 ms. in the ground  
for closing cor. of secs. 2 and  
3, marked on brass cap  
CCT 23 S R 16 E S 34 S 35 on N. bdy.  
S & in SE, and

S 3 m SW. quadrant,  
raise a mound of stone, 2 ft.  
base  $1\frac{1}{2}$  ft. high S. of cor.  
Note: I destroy old cor. pertaining to secs. 2 & 3.  
Its impact scable

Land, hilly and level.

Soil, rocky and sandy loam; 4<sup>th</sup>  
and 1<sup>st</sup> rates.

No timber.

Mudergrowth, shadscale and  
greasewood.

Level land and rich sandy loam  
soil on N. 14. 90 chs.

October, 10, 1911.

October 11: At 7:47 a.m. l.m.t.,  
I set off  $38^{\circ} 41' N.$ , on the lat. arc;  
 $6^{\circ} 43' S.$ , on the decl. arc; and  
determine a meridian with  
the solar at the cor. of secs.  
3, 4, 33 and 34 on the S. bdy. of  
the tp. heretofore described.  
Hence I run

N.  $0^{\circ} 02'$  W, bet. secs. 33 and 34.

Over mountainous land.

The line north passes along the  
east edge of Three Canyons which  
is cut in solid sandstone and  
about 300 ft. deep.

To determine distance to N. side  
of canyon, I set a flag on line  
on N. side, then measure a  
base line N.  $89^{\circ} 58' E.$ , 20.00 chs., to  
a point from which flag bears  
N.  $32^{\circ} 52' W.$ , from the flag the  
east end of the base bears S.  $32^{\circ} 52' E.$

180°  
N 89° 58' E  
2000 5910'

Subdivision of T. 24 S., R. 16 E.

chain.

- therefore tan.  $57^{\circ} 10' \times$  base or  
 $1.51497 \times 20$  chs =
- 30.99 To north side canyon, bears  
 $77.20^{\circ}$  E., and S.  $20^{\circ}$  W.  
 Hence over land facing E.
- 40.00 Set an iron post, 3 ft. long, 1 mi.  
 in dia., 26 ins. in a mound of  
 stone 4 ft. base, 2 ft. high, for  
 1/4 sec. cor., marked on brass cap  
 $\frac{1}{4} S 33^{\circ} 30'$  on W. half and  $S 34^{\circ} 00'$  on E.  
 Half, raise a mound of stone, 2  
 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.  
 This impracticable
- Note: On account of natural  
 obstacles I am unable to set post  
 in the ground.
- 52.00 Ridge, 50 ft. high, bears E. + W.  
 Ascend 30 ft. to
- 54.25 Wash, 20 chs. wide, course E.  
 Ascend 25 ft. to
- 61.00 Spur, projects E. 2 chs.  
 Ascend 25 ft. to
- 63.75 Wash, 25 chs. wide, course S.E.  
 Ascend 40 ft. to
- 68.00 Ridge, bears E.. W.  
 Ascend 50 ft. to
- 73.50 Wash, 15 chs. wide, 5 ft. deep,  
 course E.  
 Ascend 40 ft. to
- 80.00 Set an iron post, 3 ft. long, 2 mis.  
 in dia., 24 ins. in a mound of  
 stone 4 ft. base, 2 ft. high for cor.,  
 of secs. 27, 28, 33 and 34, marked  
 on brass cap
- $T 21 S 3^{\circ} 28' m NW,$   
 $R 16 E S 3^{\circ} 27' m NE,$   
 $S 31^{\circ} m SE$  and  
 $S 33^{\circ} m SW$  quadrant
- raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high W. of cor.

## Subdivision of T. 24 S., R. 16 E.

Chama.

	Pits impracticable Note: On account of natural obstacles I am unable to set post in the ground. Land, mountainous draining E. Soil, rocky and sandy on rocky sub-soil; 4 <sup>th</sup> rate. No timber Undergrowth, short shadscale. Mountainous land \$0.00 chs.
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	N. 89° 59' E., on random line bet. secs. 27 and 34
22.50	West side three canyons, 300 ft. deep and vertical walls of sand- stone, across which, I cannot chain. To determine distance across canyon, I set a flag on line on E. side, then measure a base line N. 0° 0' W., 4 chs., to point from which flag bears S. 58° 0' E., from the flag the north end of the base bears N. 58° 0' W., therefore tan 58° 0' × base or $1.60 \times 4$ chs = 6.40 chs., which added to 22.50 chs., makes
28.90	East side of canyon, bears N. + S.
40.00	Set temporary $\frac{1}{4}$ sec. cor.
79.96	Intersect N. + S. line 5 lks. N. of the cor. of secs. 26, 27, 34 and 35. Hence I run
	N. 89° 59' W., on true line bet. secs. 27 and 34.
11.00	over broken land draining NW. Wash, 15 lks. wide, 2 ft. deep, course N.
35.00	Enter sandstone bed rock, bears N. + S.
39.98	Set an iron post, 3 ft. long, 1 in. in dia., 26 lbs. in a mound of stone 1 ft. base, 2 ft. high for $\frac{1}{2}$ sec.

Subdivision of T. 24 S., R. 16 E.

chains	
	cor., marked on brass cap $\frac{1}{4}$ S. 27° on N. half and S. 34° on S. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable
	Note: On account of natural objects I am unable to set post in the ground.
51.06	East side of Three Canyons, bears N.E. and S. $20^{\circ}$ W.
58.46	West side of canyon, bears N.E. and S. $20^{\circ}$ W. Gradually ascend.
79.96	The cor. of secs. 27, 28, 33 and 34. Land broken, draining E. & W. to Three canyons. Soil, rocky on rocky sub-soil; 4 <sup>th</sup> rate. No timber. No Undergrowth.
	N. $0^{\circ} 02'$ W., bet. secs. 27 and 28 over broken hilly land draining N.E. Gradually ascend
11.00	Ridge, bears E. & W. Ascend 40 ft. to
21.00	Wash, 10 lks. wide, 3 ft. deep, course N.E. Ascend 30 ft. to
25.00	Ridge, bears E. & W. Descend
37.50	Junction of three washes, from NW, W. and SW., 50 lks. wide, 3 ft. deep, course E. Road across wash bears N.E. and SW. Ascend.
40.00	Set an iron post, 3 ft. long. 1 m. n.

## Subdivision of T. 24 S., R. 16 E.

Chains:

- dia., 26 ins. in a mound of stone  
4 ft. base, 2 ft. high for  $\frac{1}{4}$  sec. cor.,  
marked on brass cap  $\frac{1}{4} S^{\circ} 28$  on  
W. half and  $S^{\circ} 27$  on E. half, raise  
a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft.  
high W. of cor.  
Pits impracticable.  
Note: On account of natural obstacles  
I am unable to set post in the  
ground.
- 41.50 Top of ascent, bears E. & W.  
Gradually descend over broken  
ground.
- 68.50 Wash, 40 lks. wide, 2 ft. deep,  
course N.E.  
Ascend 25 ft. to
- 72.00 Ridge, bears N.E. and S.W.  
Descend 30 ft. to
- 77.00 Wash, 20 lks. wide, 1 ft. deep,  
course N.  $70^{\circ}$  E.  
Gradually ascend.
- 80.00 Set an iron post, 3 ft. long, 2 ins.  
in dia., 34 ins. in a mound of  
stone, 4 ft. base, 2 ft. high for cor.  
of secs. 21, 22, 27 and 28, marked  
on brass cap
- T. 24 S<sup>o</sup> 21 in NW,  
R 16 E S<sup>o</sup> 22 in NE,  
S<sup>o</sup> 27 in SE and  
S<sup>o</sup> 28 in SW quadrants  
raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high W. of cor.  
Pits impracticable.
- Note: On account of natural  
obstacles, I am unable to set post  
in the ground.
- Land, hilly, draining N.E.  
Soil; gravelly and rocky on rocky  
sub-soil; 4<sup>th</sup> rate.
- No timber

Subdivision of T. 24 S., R. 16 E.

chains

Undergrowth, short shadscale.

October 11: At this sec. cor., I set off  $6^{\circ} 48' S.$ , on the decl. arc; and at  $11^{\text{h}} 47^{\text{m}}$  a.m. l.m.t., observe the sun on the meridian; the resulting lat. is  $38^{\circ} 42'$ .

S.  $89^{\circ} 59' E.$ , on random line bet. secs. 22 and 27.

40.00 Set temporary  $\frac{1}{4}$  sec. cor.  
 53.00 West side of Three Canyons with vertical walls of sandstone about 300 ft. high, across which I cannot chain.  
 To determine distance across canyon, I set a flag on line on E. side, then measure a base line  $N. 0^{\circ} 0' E.$ , 5.00 chs., to a point, from which flag bears  $S. 54^{\circ} 04' E.$ , from the flag the north end of the base bears  $N. 54^{\circ} 04' W.$ , therefore  $\tan 54^{\circ} 05' \times \text{base or } 4.38 \times 500 \text{ chs} = 6.90 \text{ chs.}$ , which added to 53.00 chs., makes

59.90 To east side of canyon.

80.01 Intersect  $N. + S.$  line of lks. S. of the cor. of secs. 22, 23, 26 and 27. Hence I run

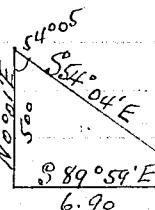
S.  $89^{\circ} 58' W.$ , on tree line bet. secs. 22 and 27.

Gradually descend across solid sandstone bedrock.

20.11 East side of Three Canyons, 300 ft. deep, bears N. and S.

27.01 West side of canyon, bears NE & S. Gradually ascend.

40.00  $\frac{1}{4}$  Set an iron post, 3 ft. long, 1 in. m. dia., 26 ins. in a mound of stone, 1 ft. base, 2 ft. high for  $\frac{1}{4}$  sec. cor., marked on brass cap  $\frac{1}{4} S. 22$  on



Subdivision of T. 24 S., R. 16 E.

chain	
	N. half and S <sup>o</sup> 27 on S. half, raise a mound of stone, 2 ft. base, 1½ ft. high N. of cor. Pits impracticable Note: On account of natural obstacles I am unable to set post in the ground.
57.60	Wash, 15 lks. wide, 2 ft. deep, course NE.
75.00	Wash, 50 lks. wide, 1 ft. deep, course NE. Road in wash, bears N. & S.
80.01	The cor. of sees. 21, 22, 27 and 28. Land, rolling. Soil, rocky on rocky sub-soil, 4 <sup>th</sup> rate. No timber No Undergrowth
	N. 0° 02' W., bet. sees. 21 and 22. Over hilly land.
41.50	Wash, 20 lks. wide, 2 ft. deep, course NE. Ascend 40 ft. to
27.50	Low ridge, bears NE. and SW. Descend.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., marked on brass cap 1/4 S 21 on W. half and S 22 on E. half, raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor. Pits impracticable.
44.00	Wash, 10 lks. wide, 75 ft. below ridge, course W. Ascend 75 ft. to
50.00	Ridge, bears E. & W. Each is a sandstone knoll, 60 ft. high.

28

Subdivision of T. 24 S., R. 16 E.

Chains	
78.00	Gradually descend 125 ft to Enter solid sandstone bed rock, bears E. and W.
80.00	Set an iron post, 3 ft. long, 2 in. in dia., 2 $\frac{1}{4}$ in. in a mound of stone, 4 ft. base, 2 ft. high for cor. of secs. 15, 16, 21 and 22, marked on brass cap
	T 24 S S 16 in NW, R 16 E S 15 in NE, S 22 in SE and S 21 in SW quadrants
	raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
	Note: On account of natural obstacles, I am unable to set post in the ground. Land, hilly. Soil, gravelly and rocky on rocky sub-soil; 4 <sup>th</sup> rate.
	No timber. Undergrowth, short shadscale.
	October 11, 1911

October 12: At 6<sup>h</sup>. 47<sup>m</sup>. a.m. l.m.t.,  
I set off 38° 43' on the lat. arc;  
7° 03' S., on the decl. arc; and  
determine a meridian with the  
solar at the cor. of secs. 15, 16, 21  
and 22.

Hence I run  
N. 89° 58' E., on random line bet.  
secs. 15 and 22.

40.00 Set temporary 1/4 sec. cor.  
79.94 Intersect the cor. of secs. 14, 15, 22  
and 23.  
Hence, I run  
S. 89° 58' W., on line bet. secs.  
15 and 22.

Subdivision of T. 24 S., R. 16 E.

climbs

	Over hilly land draining South descend.
5.00	wash in hollow, 20 lks. wide, course S.; forms box canyon 10 chs. S.
	Ascend over rocky ground.
26.00	Ridge, bears N.E. and S.W. Hence over land draining NW. descend.
39.97	Set an iron post, 3 ft. long, 1 m. in dia., 26 ms. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4} S 15^{\circ}$ on N. half and $S 22^{\circ}$ on S. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. It's impracticable.
43.28	wash, 20 lks. wide, 2 ft. deep, course N.
53.00	wagon road, bears N. + S.
61.00	wash, 25 lks. wide, 2 ft. deep, course N.
72.50	wash, 25 lks. wide, 5 ft. deep, course NW. Enter solid sandstone bed rock, bears N. and SW.
79.45	The cor. of secs. 15, 16, 21 and 22. Land, hilly. Soil, rocky, on rocky sub-soil, $\frac{1}{12}$ rate. No timber. Undergrowth, short shale-scale

N.  $0^{\circ} 02'$  W., bet. secs. 15 and 16.  
descend over solid sandstone  
bed rock.

- 5.00 wash, 25 lks. wide, course NW.  
25.00 south side of box canyon and  
ledge, 100 ft. high, bears  $N. 20^{\circ} E.$   
and S.W.  
descend abruptly.

Subdivision of T. 24 S., R. 16 E.

chain.

- 29.00 Wash in canyon, 40 lks. wide,  
150 ft. below top, coarse NE.  
Ascend abruptly over ledges.
- 36.00 Top of north side of canyon,  
150 ft. above base, bears NE. and  
SW.  
Gradually ascend
- 40.00 Set an iron post, 3 ft. long, 1 in.  
in dia., 26 ins. in the ground for  
 $\frac{1}{4}$  sec. cor., marked on brass cap  
 $\frac{1}{4}$  S 16 on W. half and S 15 on E.  
half, dig pits,  $18 \times 18 \times 12$  ins., N.  
and S. of post, 3 ft. dist., raise  
a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$   
ft. high W. of cor.
- 58.00 Top of sand brush, 100 ft. above  
 $\frac{1}{4}$  sec. cor., bears NE. and SW.  
Gradually descend
- 80.00 Set an iron post, 3 ft. long, 2 ins.  
in dia., 24 ins. in the ground for  
cor. of secs. 9, 10, 15 and 16 marked  
on brass cap
- T 24 S S 9 mi NW,  
R 16 E S 10 mi NE,  
S 15 mi SE. and  
S 16 mi SW. quadrants
- dig pits,  $18 \times 18 \times 12$  ins., in each sec.,  
 $5\frac{1}{2}$  ft. dist., raise a mound of  
earth, 1 ft. base, 2 ft. high W. of  
cor.

Land, mountainous and level.

Soil, rocky and sandy; 4<sup>th</sup> and  
2<sup>nd</sup> rate.

Sub-soil; rocky and gravelly: 3<sup>rd</sup>  
4<sup>th</sup> rates.

No timber

Undergrowth, short shadscale.

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N. 89° 58' E., on random line bet.  
secs. 10 and 15

Subdivision of T. 24 S., R. 16 E.

Chains	
40.00	Set temporary $\frac{1}{4}$ sec. cor.
80.01	Intersect N. & S. line 3 lks. S. of the cor. of secs. 10, 11, 14 and 15. Hence I run $S. 89^{\circ} 57' W.$ , on true line bet. secs. 10 and 15.
	Gradually descend over rolling land sloping W.
18.00	Begun abrupt descent.
18.78	Wash in canyon, 50 ft. deep, course $N. 60^{\circ} W.$ Ascend over rocky land.
37.15	East side of box canyon and ledge 150 ft. high, bears NE. & SW. Point for $\frac{1}{4}$ sec. cor. will fall in wash in canyon, therefore perpetuate cor. on solid ground as follows: Set an iron post, 3 ft. long, 1 in. in dia., 26 in. in a mound of stone 4 ft. base, 2 ft. high for witness cor. to the $\frac{1}{4}$ sec. cor., marked on brass cap T. 24 S. R. 16 E S 10 on N. half and S 15 on S. half, with W C $\frac{1}{4}$ to the W., raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. It's impracticable. Note: On account of natural obstacles I am unable to set post in the ground.
38.00	Descend abruptly over ledge. Base of ledge and wash in bottom of canyon, 40 lks. wide, course NE. Hence up wash
44.00	Point for $\frac{1}{4}$ sec. cor. in wash.
41.00	Base of west side of canyon and ledge 88 ft. high. Ascend abruptly.
45.00	Top of west side of canyon, 175 ft. above base, bears NE. and SW.

Subdivision of T. 2 & S., R. 16 E.

chains	
80.01	<p>Thence over land facing north, across sandy bank</p> <p>The cor. of secs. 9, 10, 15 and 16 Land, rolling cut by canyon, draining N.</p> <p>Soil, rocky and sandy on rock and gravel sub-soil; 4<sup>th</sup> rate.</p> <p>No timber</p> <p>Undergrowth, short shadecale</p>
100.00	<p>N. 0° 0' W., bet. secs. 9 and 10 Gradually descend over rolling land sloping N.</p> <p>Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground and mound of stone for <math>\frac{1}{4}</math> sec. cor., marked on brass cap <math>\frac{1}{4}</math> S 9° W. half and S 10° on E. half, raise a mound of stone 2 ft. base, <math>\frac{1}{4}</math> ft. high W. of cor. Pits impracticable.</p> <p>Note: On account of natural obstacles I am unable to set post more than 12 ins. in the ground.</p>
45.00	<p>Wash, 20 ins. wide, 2 ft. deep, course NE.</p>
50.00	<p>Ascend 40 ft. to Ridge, bears NE. and SW.</p>
72.00	<p>Gradually descend.</p>
74.25	<p>Ledge, 40 ft. high, bears E. &amp; W. Descend abruptly.</p>
76.00	<p>Right bank of San Rafael river, course N. 70° E.</p> <p>Thence across nearly dry channel of stream.</p> <p>Left. bank of river, course N. 70° E. Enter dense willow undergrowth and cottonwood timber.</p>

Subdivision of T. 24 S., R. 16 E.

chain's	
80.00	<p>Thence over bottom land.  Set an iron post, 3 ft. long, 2 ins.  in dia., 2<math>\frac{1}{4}</math> ins. in the ground  for cor. of secs. 3, 4, 9 and 10,  marked on brass cap</p> <p>T 24 S<math>8\frac{1}{4}</math> m NW,  R 16 E S<math>3\frac{1}{4}</math> m NE,  S<math>10\frac{1}{4}</math> m SE. and  S<math>9\frac{1}{4}</math> m SW. quadrant,  from which</p> <p>A cottonwood, 15 ins. diam., bears  N. <math>40\frac{1}{2}^{\circ}</math> E., 138 lks. dist., marked</p> <p>T 24 S R 16 E S<math>3\frac{1}{4}</math> BT</p> <p>A cottonwood, 13 ins. diam., bears  S. <math>42\frac{1}{2}^{\circ}</math> E., 299 lks. dist., marked</p> <p>T 24 S R 16 E S<math>10\frac{1}{4}</math> BT</p> <p>A cottonwood, 10 ins. diam., bears  S. <math>50^{\circ}</math> W., 86 lks. dist., marked</p> <p>T 24 S R 16 E S<math>9\frac{1}{4}</math> BT</p> <p>A cottonwood, 12 ins. diam., bears  N. <math>38^{\circ}</math> W., 123 lks. dist., marked</p> <p>T 24 S R 16 E S<math>4\frac{1}{4}</math> BT.</p> <p>Rand, rolling, and level.  S. 72 chs. rolling land with  general North slope to San  Rafael river. Soil, rocky and  gravely on rocky sub-soil; 4<sup>th</sup> rate  N. 4 chs. level bottom land. Soil;  rich sandy loam with a deep  sand sub-soil. Timber some  cottonwood. Undergrowth dense  willow.</p> <p>October 12: At this sec. cor., I set  off <math>7^{\circ} 11'</math> N., on the decl. arc;  and at <math>11^{\text{h}} 47^{\text{m}}</math> a.m. l.m.t.,  observe the sun on the meridian,  the resulting lat. is <math>38^{\circ} 45'</math></p>
	<p>N. <math>89^{\circ} 57'</math> E., on random line bet.  secs. 3 and 10</p>

N.  $89^{\circ} 57'$  E., on random line bet.  
secs. 3 and 10

Subdivision of T. 24 S., R. 16 E.

chain.

40.00	Set temporary $\frac{1}{4}$ sec. cor.
80.05	Intersect N. & S. line 12 lks. N. of the cor. of secs. 2, 3, 10 and 11. Hence I run
	N. $89^{\circ} 58'$ W., on true line bet. secs. 3 and 10.
	Over hilly land.
	Descend 50 ft. to
9.00	Head of wash, 10 lks. wide, course SW.
	Ascend 75 ft. to
15.00	Sandstone spur, projects S. 1 ch.
	Descend abruptly 75 ft. to
18.00	Base of ridge, bears N. & S. Gradually descend.
34.00	New road, bears NW. and SE.
36.00	East side of canyon, bears NW. and S.
	Descend abruptly over ledges.
38.00	Base of canyon and wash, 40 lks. wide, 100 ft. deep, coarse NW. & chs., thence W.
	Hence in canyon.
40.02 <sup>1/4</sup>	Set an iron post, 3 ft. long, 1 in. in dia., 26 in. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 3 on N. half and S 10 on S. half, dig pits, 18 x 18 x 12 in., E. and W. of post 3 ft. dist., raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
45.00	Same canyon wash, 50 lks. wide, course S. $80^{\circ}$ W.
	Ascend 30 ft. to
48.00	Spur, projects S.
	Descend 30 ft. to
51.00	Enter bottom land of San Rafael river, bears N. & SW. Hence through dense cottonwood timber.

Subdivision of T. 24 S., R. 16 E.

chainds.

53.00	Same canyon wash, 70 lcs. wide, coarse NW.
67.50	Right bank of San Rafael river, course NE. Hence across nearly dry channel of river.
68.50	Left bank of river, course NE.
80.05	The cor. of secs. 3, 4, 9 and 10 Land, mount amous and level. E. 51 chs. mount amous land draining W. Soil, rocky on rocky sub-soil, 4 <sup>th</sup> rate. No timber. Under- growth, short shadscale.
W 29.05 chs. level river bottom. Soil, sandy loam with deep sand sub-soil; 1 <sup>st</sup> rate. Timber, dense cottonwood. Undergrowth, some greasewood.	
	Mountainous land 51.00 chs.

Knowing that closing cor. are  
necessary upon the N. bdy. of the trs.  
Draw  
N. 0° 02' W, on true line betw. secs. 3 &  
4.

6.00	Over level river bottom, through scattering cottonwood timber. Base of 60 ft. sandstone ledge, leave river bottom and timber, bear E. and W.
7.00	Ascend abruptly. Top of ledge, bear E. & W. Hence over hilly land, draining E.
10.00	Low ridge, bear E. and W. Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 4° on W. Half and S 3° on E. half, dig pits, $18 \times 18 \times 12$ ins., N. and

Subdivision of T. 2 x S., R. 16 E.

chain	
	S. of post, 3 ft. dist., raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor. descend 50 ft. to
43.40	wash, 10 lbs. wide, 1 ft. deep, course E. ascend abruptly 100 ft. to
52.25	Ridge, bears E. and W. descend 75 ft. to
60.50	wash, 15 lbs. wide, 6 ft. deep, course S. $60^{\circ}$ E. ascend 125 ft. to
77.00	Ridge, bears NW. & SE. descend 40 ft. to
78.75	wash at head, course E. 5 chs., thence SE. ascend.
79.80	intersect N. bdy. of the tp. 170 chs., N. $89^{\circ} 58'$ E., of the cor. of secs. 3, 4, 33 and 34 heretofore described. Set an iron post, 3 ft. long, 2 in. in dia., 2 $\frac{1}{4}$ in. in the ground for closing cor. of secs. 3 and 4, marked on brass cap CCT 23 SR 16 E S 33 S 34 on N. half, S 3' m SE and S 4' m SW quadrant; dig pits, $2\frac{1}{2} \times 18 \times 12$ in., crosswise on each line, E. and W. 3 ft., and S. of post 7 ft. dist., raise a mound of earth 4 ft. base, 2 ft. high S. of cor. I destroy all marks on old cor. pertaining to secs. 3 & 4. Land mountainous and level. S. 6 chs. level land on river bottom, Soil, rich sandy loam with a deep sand sub-soil, 1 <sup>st</sup> rate. Timber scattering cottonwood Undergrowth, some willow

Subdivision of T. 24 S., R. 16 E

chains.	N. 73.80 chs. mountainous land with easterly drain. Soil, gravelly and rocky on rocky sub-soil; 4 <sup>th</sup> rate No timber Undergrowth, short shadscale. Mountainous land 73.80 chs.
	October 12, 1911
26.80	October 13: At 7 <sup>h</sup> 47 <sup>m</sup> a.m. I. m.t.; I. set off 38° 41' on the lat. arc; 7° 29' S <sup>o</sup> , on the decl. arc; and determine a meridian with the solar at the cor. of secs. 4, 5, 32 and 33 on the S. bdy. of the tp. heretofore described. Hence I run N. 0° 03' W., bet. secs. 32 and 33. Over mountainous land across solid sandstone ridge. Top of sandstone ledge, 30 ft. high, bears N.E. and W. Descend abruptly.
27.25	Base of ledge, leave sandstone bed rock, bears N.E. and W. Hence over broken land.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone, 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 32 on W. half and S 33 on E. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable Note: On account of natural obstacles, I am unable to set post in the ground.
41.25	Wash, 15 eks. wide, 2 ft. deep, coarse SW. & chs, thence west.
58.50	Wash, 20 eks. wide, 5 ft. deep

Subdivision of T. 24 S., R. 16 E.

chain.	
	course SW.
63.25	Ascend 25 ft. to low ridge, bears E. and W. Descend 50 ft. to
77.50	Wash, 15 lks. wide, course N. 60° W. Ascend 50 ft. to
80.00	Spur projects SW. at SW. cor. of huge sandstone pinnacle. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in a mound of stone, 4 ft. base, 2 ft. high, for cor. of secs. 28, 29, 32 and 33, marked on brass cap T 24 S. S. 29 in NW, R 16 E. S. 28 in NE, S 33 in St. and S 32 in SW. quadrant. raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor. Post impracticable
	Note: On account of natural obstacles, I am unable to set post in the ground. Land, mountainous with a general NW. drain. Soil, rocky on rocky sub-soil; 4 <sup>th</sup> rate. No timber Undergrowth, some short shad- scale. Mountainous land, 80.00 cha.

N. 89° 59' E., on random line bet.  
secs. 28 and 33  
Set temporary 1/4 sec. cor.  
Intersect N. + S. line 3 lks. N. of  
the cor. of secs. 27, 28, 33 and 34  
Hence. I run  
West, on true line, bet secs. 28 and 33.

Subdivision of T. 24 S., R. 16 E.

chain	
	Gradually ascend over rolling land.
12.00	Wagon road, bears N. + S.
21.00	Low ridge, 25 ft. above sec. cor., bears N. + S.
35.00	Wash near head, course NE. Ascend
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone, 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4} S 28$ on N. half and $S 33$ on S. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable
	Note: On account of natural obstacles, I am unable to set post in the ground.
41.00	Low saddle between two sandstone ridges, bears N. + S. Gradually descend.
80.00	The cor. of secs. 28, 29, 32 and 33. Land, rolling, draining E. on E. 41 chs. and W. of W. 39 chs. Soil, sandy, gravelly and rocky on rocky sub-soil; 4 <sup>th</sup> rate. No timber. Undergrowth, short shadscale.
	October 13: At this sec. cor., I set off $7^{\circ} 33'$ S., on the decl. arc; and at $11^{\text{th}} 47^{\text{m}}$ a.m. l. m. t., observe the sun on the meridian; the resulting lat. is $38^{\circ} 42'$

N. 0° 03' W., bet. secs. 28 and 29.  
Over broken land draining W.  
Ascend.  
West side of sandstone pinnacle.  
Descend  
Wash, 10 lbs. wide, 2 ft. deep,

1.75

8.50

Subdivision of T. 24 S<sup>o</sup>, R. 16 E.

Chains	
	Course W. Gradually ascend Wash 10 lks. is a pinnacle 40 ft. high
12.00	Ridge, bears E. & W.
13.00	Descend 20 ft. to
16.75	Wash, 10 lks. wide, 2 ft. deep, course SW. Ascend 30 ft. to
22.00	Sandstone ridge, bears NE. and SW.
	Descend.
40.00	Set an iron post, 3 ft. long, 1 mi. in dia., 26 ins. in the ground for 1/4 sec. cor., marked on brass cap $1\frac{1}{4} S 29$ on W. half and $S 28$ on E. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
	Pits impracticable
41.25	Wash, 20 lks. wide, 3 ft. deep, course W. 1 ch., thence N.
	Ascend 40 ft. to
58.00	Point of ridge, bears NE. and SE.
64.00	Same ridge, bears NW. and SE.
	Descend 75 ft. to
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in a mound of stone 4 ft. base, 2 ft. high, for cor. of secs. 20, 21, 28 and 29, marked on brass cap
	$T 24 S 520$ in NW, $R 16 E S 21$ in NE, $S 28$ in SE. and $S 29$ in SW. quadrant.
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
	Pits impracticable
	Note: On account of natural obstacles, I am unable to set post in the ground.

## Subdivision of T. 24 S., R. 16 E.

chains	
	Land, mountainous draining W. Soil, rocky on rocky sub-soil, + rate. No timber Undergrowth, short shadscale Mountainous land, 80.00 cha.
40.00	East, on random line, bet. secs. 21 and 28 Set temporary $\frac{1}{4}$ sec. cor. Intersect N. + S. line 9 lks. N. of the cor. of secs. 21, 22, 27 and 28. Hence 3 runs N. $89^{\circ} 56' W.$ , on true line bet. secs. 21 and 28.
80.07	Over mountainous land facing E. Ascend 100 ft. to Top of solid sandstone ridge, bears N.E. and S.
16.00	Descend abruptly.
20.00	Leave solid sandstone and base of abrupt descent, continue gradual descent.
31.00	Wash, 10 lks. wide, 2 ft. deep, course N.
37.50	Ascend 50 ft. to Ridge, bears N.W. and S. Descend.
40.03 $\frac{1}{4}$	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4} S 21'$ on N. half and $S 28'$ on S. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable
49.50	Wash, 15 lks. <sup>wide</sup> $\frac{1}{2}$ ft. deep, course N.W.
65.00	Wash, 40 lks. wide, 3 ft. deep.

Subdivision of T. 24 S., R. 16 E.

Chains	
	course N. 30° W., 3 chs., thence N. 70° W.
75.75	Mash, 25 lks. wide, 3 ft. deep, course N. 30° W.
80.07	The cor. of secs. 20, 21, 28 and 29. Land, mountainous. Soil, rocky on rocky sub-soil; $\frac{4}{4}$ th rate. No timber. Undergrowth, short shadscale. Mountainous land 80.07 chs.
	N. 0° 03' W., bet. secs. 20 and 21 Over mountainous land draining North. Gradually descend.
5.75	Mash, 25 lks. wide, 20 ft. deep, course W.
25.00	South side of box canyon and ledge, 125 ft. high, bears N. 30° E., and SW. Descend abruptly.
27.00	Mash in canyon, 40 lks. wide, course N. 30° E. Ascend abruptly.
31.00	North side of canyon and ledge, 125 ft. high, bears N. 10° E and SW. Thence along east slope near top of canyon.
39.00	Ledge and top of canyon, bears E. and S. 10° W. Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone, 4 ft. base, 2 ft. high for $\frac{1}{4}$ chs. cor., marked on brass cap $\frac{1}{4}$ S 26 on W. half and S 21 on E. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. It's impracticable.

Subdivision of T. 24 S., R. 16 E.

Cham.

Note: On account of natural obstacles I am unable to set post in the ground.

115.50 Begin ascent over S. face of solid sandstone ridge.

80.00 Point for sec. cor. falls on solid sandstone, mark + for exact cor. point.

Set an iron post. 3 ft. long, 2 in. in dia., 24 lbs. in a mound of stone, 4 ft. base, 2 ft. high for cor. of secs. 16, 17, 20 and 21, marked on brass cap

T 24 S. S. 17 m NW.

R 16 E. S. 16 m N.

S 21 m S. and

S 20 m SW. quadrant,

raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.

Pits impracticable

Note: On account of natural obstacles, I am unable to set post in the ground.

Land, mountainous

Soil, rocky on rocky sub-soil;  
 $\frac{1}{4}$  rate.

No timber

No undergrowth.

Mountainous land 8000 chs.

October 13, 1911

October 14: At 6<sup>h</sup>. 46 m. a.m. I mt., I set off  $38^{\circ} 43'$  on the lat. arc;  $7^{\circ} 17' S.$  on the decl. arc, and determine a meridian with the solar at the cor. of secs. 16, 17, 20 and 21.

There I run

$5.89^{\circ} 56' E.$ , on random line bet. secs. 16 and 21.

Subdivision of T. 24 S., R. 16 E.

Chains.

- 140.00 Set temporary 1/4 sec. cor.
- 80.02 Intersect N. & S. line 2 lks. S. of the cor. of secs. 15, 16, 21 and 22  
Hence 2 mms  
N.  $89^{\circ} 57'$  W., on true line bet. secs.  
16 and 21.
- Over broken land draining NW.  
across solid sandstone bed rock.  
Top of ledge, 125 ft. high and E.  
side of box canyon, drains NE.  
and SW.
- Descend abruptly.
- 21.25 Bottom of canyon and wash, 50 lks.  
wide, course NE.
- Ascend abruptly over ledges.
- 25.60 Top of west side of canyon and ledge  
125 ft. high, drains NE. and SW.
- Gradually ascend.
- 400.01 Set an iron post, 3 ft. long, 1 in. in  
dia., 26 ins. in a mound of  
stone, 4 ft. base, 2 ft. high, for 1/4  
sec. cor., marked on brass cap 1/4  
S 16 on N. half and S 21 on S. half,  
raise a mound of stone, 2 ft. base,  
1 1/2 ft. high N. of cor.  
Post impracticable
- Note: On account of natural obstacles  
I am unable to set post in the  
ground.
- 49.00 Begin ascent over SE. face of  
solid sandstone ridge.
- 55.00 Sandstone spur, projects NE.
- Descend 50 ft. to
- 58.00 Head of Gulch, drains NE.
- Ascend 50 ft. to
- 60.00 Same spur, projects S.
- Descend 25 ft. to
- 62.00 Head of gulch, drains S.
- Ascend.
- 80.02 The cor. of secs. 16, 17, 20 and 21.

## Subdivision of T. 24 S., R. 16 E.

chain:

	Land, mountainous. Soil; rocky; 4 <sup>th</sup> rate. No timber No Undergrowth. Mountainous land, 8000 ft.
16.00	N. 0° 03' W., bet. secs. 16 & 17. descend over south face of solid sandstone ridge
17.00	Leave bed rock bears E. and W. Enter stony ground, ascend.
22.00	Top of flat ridge, 200 ft. above sec. cor., bears E. and W.
30.00	North side of ridge, bears E. and W. Begin abrupt descent over solid sandstone bed rock.
40.00	200 ft. below ridge. Set an iron post, 3 ft. long, 1 in. in. dia., 26 lbs. in a mound of stone for 1/4 sec. cor., marked on brass cap 1/4 S 17' on W. half and S 16' on E. half, raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor., Pits impracticable
	Note: On account of natural obstacles, I am unable to set post in the ground.
48.17	Wash, 15 lbs. wide, 2 ft. deep, course NW. Base of solid sandstone, bears E. and W.
	Gradually descend
51.25	Same wash, course NW.
63.00	Same wash, course NW.
65.50	Same wash, course N. 20° E.
74.60	Same wash, course N. 35° W.
	Ascend 50 ft. to
80.00	Set an iron post, 3 ft. long, 2 lbs.

Subdivision of T. 24 S., R. 16 E.

chains	
	iii dia., 24 ins. in a mound of stone, 4 ft. base, 2 ft. high for cor. of secs. 8, 9, 16 and 17, marked on brass cap
	T 24 S 8' in NW, R 16 E S 9' in NE, S 16' in SE. and S 17' in SW. quadrant, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
	Note: On account of natural obstacles, I am unable to set post in the ground. Land, mountainous. Soil, rocky on rocky sub-soil; 4 <sup>th</sup> rate. No timber. No Undergrowth. Mountainous land, \$0.00 per acre.
	S. $89^{\circ} 57'$ E., on random line bet. secs. 9 and 16. Set temporary $\frac{1}{4}$ sec. cor. Intersect N. + S. line 3 eks. S. of the cor. of secs. 9, 10, 15 and 16. Hence I run
40.00	N. $89^{\circ} 58'$ W., on true line bet. secs. 9 and 16. Gradually descend over gently rolling land.
80.04	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 9' on N. half and S 16' on S. half, dig pits, $18 \times 18 \times \frac{1}{2}$ ins., E. and W. of post, 3 ft. dist., raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
40.02	Enter hilly land, bears N. + S.
H8.00	

## Subdivision of T. 24 S., R. 16 E.

chain	
58.00	Gradually ascend. Low ridge, bears N. & S.
62.50	Descend 35 ft. to wash, 20 ells. wide, 2 ft. deep. course N.
68.00	Ascend 40 ft. to Ridge, bears N. and S.
80.00	Gradually descend. The cor. of secs. 8, 9, 16 and 17. Land, gently rolling and hilly. E. 48 chs. gently rolling brush. Soil, sandy and gravelly with a gravelly sub-soil; 2 <sup>nd</sup> rate. Good grass for grazing. W 32.0 chs. hilly land draining N. Soil, gravelly and rocky on rocky sub-soil; 4 <sup>th</sup> rate. No timber Undergrowth, short shadscale. October 14: At this sec. cor., I set off 7° 56' S. on the decl. arc; and at 11 <sup>h</sup> 46 <sup>m</sup> a.m. l.m.t., observe the sun on the meridian; the resulting lat. is 38° 44'.

18.00	N. 0° 03' W., bet. secs. 8 and 9. Gradually descend over hilly land draining NW.
25.00	Wash, 15 ells. wide, 8 ft. deep, course N. 60° W.
34.00	Ascend 60 ft. to top of flat ridge, bears E. and W. Descend from ridge over land facing N.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., marked on brass cap 1/4 S. 8° on W. half and S. 9° on E. half, raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor. Pits impracticable

Subdivision of T. 24 S<sup>o</sup>, R. 16 E.

chains	
8.00	<p>Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 4, 5, 8 and 9, marked on brass cap.</p> <p>T 24 S<sup>o</sup> 5' S in NW,      R 16 E S<sup>o</sup> 4' in NE,          " 9' in SE. and          " 8' in SW. quadrant,      dig pits, 18 x 18' x 12 ins. in each.      sec., 5<math>\frac{1}{2}</math> ft. dist.; raise a mound of earth, 4 ft. base, 2 ft. high W.      of post.</p> <p>Land, hilly, with a general NW. drain.</p> <p>Soil, -gravelly and rocky; on rocky sub-soil; 4<sup>th</sup> rate.</p> <p>Not timbered</p> <p>No Undergrowth.</p>
14.00	<p>S. 89° 58' E., on random line bet. secs. 4 and 9</p> <p>Set temporary 1/4 sec. cor.</p>
80.16	<p>Intersect the cor. of secs. 3, 4, 9 and 10</p> <p>Hence I run</p> <p>N. 89° 58' W., on true line bet. secs. 11 and 9</p> <p>Over level bottom land of Dan Rafael river, through scattering cottonwood timber and undergrowth of willow.</p>
4.25	<p>Left bank of Dan Rafael river, 125 chs. wide, course S.E.</p> <p>Leave timber and undergrowth</p> <p>Hence up nearly dry channel of stream.</p>
15.00	<p>Left bank of river, course E.</p> <p>Leave bottom land.</p> <p>Ascend over broken land draining S.</p>

Subdivision of T. 24 S., R. 16 E.

chain.

- 33.00 Spur, 100. ft. above river, projects S.  
Gradually descend.
- 40.08 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone 4 ft. base, 2 ft. high for  $\frac{1}{4}$  sec. cor., marked on brass cap  $\frac{1}{4}$  S  $\frac{1}{4}$  on N. Half and S  $\frac{1}{4}$  on S. Half, raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high N. of cor.  
Pits impracticable  
Note: On account of natural obstacles, I am unable to set post in the ground.
- 52.50 Left bank of Saw. Rapid river, course SE.  
Hence across nearly dry channel of stream.
- 54.75 Right bank of river, course SE.  
Enter bottom land and cottonwood timber
- 62.00 Wash, 40 lks. wide, 4 ft. deep, course NE.  
Leave bottom land and timber, bears NW. and SE.  
Ascend abruptly.
- 62.50 Top of ledge, 60 ft. high, bears NW. and SE.  
Hence over rolling land draining N.
- 71.25 Wash, 20 lks. wide, 2 ft. deep, course NE.
- 80.16 The cor. of secs. 4, 5, 8 and 9.  
Land, hilly and rolling.  
Soil, rocky and sandy loam; 4<sup>th</sup> and 1<sup>st</sup> rate.  
Rich sandy loam soil on river bottom.  
Timber, some cottonwoods on 16.50 chs.  
Undergrowth, willow and shadscale.

Subdivision of T. 24 S., R. 16 E.

chains

Willow undergrowth on 16.50 chs.  
of river bottom.

Knowing that closing corners are  
necessary upon the N. bdy. of the  
tp., I run

$71.0^{\circ} 05'$  W. on true line bet. secs. 4  
and 5.

Over rolling land, gradually descend  
towards San Rafael river.

27.00 Enter cottonwood timber and river  
bottom, bears E. and W.

30.00 Right bank of San Rafael river, course  
 $S. 70^{\circ}$  E.

Hence across nearly dry channel of  
stream.

32.25 Left bank of river, course  $S. 70^{\circ}$  E.

33.75 Leave cottonwood timber and  
river bottom, bears  $N. 70^{\circ}$  E. and  
 $S. 70^{\circ}$  W.

Enter rough mountainous land.

36.00 Wash, 20 lcs. wide, 3 ft. deep,  
course SW.

Ascend 75 ft to

39.80 Spur, projects SW.

Note: 3 huge sandstone pinnacles bear  
NE. about 10 chs.  
Descend.

40.00 Set an iron post, 3 ft. long, 1 in.  
in dia., 26 ins. in the ground for  
 $\frac{1}{4}$  sec. cor., marked on brass cap  
 $\frac{1}{4} S. 5^{\circ}$  on W. half and  $S. 4^{\circ}$  on E.  
half, dig pits,  $18 \times 18 \times 12$  ins., N. & S.  
of post, 3 ft. dist.; raise a mound  
of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W.  
of cor.

44.00 Wash, 15 lcs. wide, 2 ft. deep,  
course W.

Begin ascent over sandstone  
ledges.

Subdivision of T. 24 S., R. 16 E.

chaind.	
57.50	Ridge, 125 ft. high, bears W. and S. $60^{\circ}$ E. Descend 75 ft. to
61.00	Head of hollow, drains E. Ascend 75 ft. to
67.25	Spur, projects W. 1 ch. Descend 40 ft. to
69.00	Hollow drains SW. Leave solid sandstone,
	Ascend abruptly over stony ground.
78.00	Ridge, 150 ft. above hollow, bears NE. and SW. Descend.
79.76	Intersect N. bdy. of the 7p., 2.31 cha. S. $89^{\circ} 53'$ E. of the cor. of secs. 4, 5, 32 and 33 heretofore described. Set an iron post, 3 ft. long, 2' nio. in dia., 2' nio. in the ground for closing cor. of secs. 4 and 5 marked on brass cap CC T 23 S R 16 E S 32 S 33 on N. half, S 4 mi SE. and S 5 mi SW. quadrant, dig pits, 24 x 18 x 12 nio., crosswise on each line, E. and W., 3 ft., and S. of post; 7 ft. dist.; raise a mound of earth, 4 ft. base, 2 ft. high S. of cor. Note: I destroy all marks on old cor. pertaining to secs. 4 and 5. Land, rolling and mountainous, draining to the San Rafael river. Soil, gravelly and rocky on rocky sub-soil; 4 <sup>th</sup> rate. Timber, a few cottonwoods on 6.75 cha. of river bottom. Undergrowth, some scattering shadscale.
	Mountainous land 46.01 cha.

October 14, 1911.

Subdivision of T. 24 S., R. 16 E.

chain's	
	October 16: At 7 <sup>h</sup> . 46 <sup>m</sup> . a.m. l.m.t., I set off $38^{\circ} 41'$ on the lat. arc, $8^{\circ} 35'$ S., on the decl. arc, and determine a meridian with the solar at the cor. of secs. 5, 6, 31 and 32 on the S. bdy. of the tp., heretofore described. Hence I run
	$N. 0^{\circ} 03'$ W., bet. secs. 31 and 32.
	Over rolling land, draining E.
24.00	Enter solid sandstone bed rock, bears E. and W.
30.00	Wash, 10 lks. wide, 5 ft. deep, course E.
	Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 in. in a mound of stone 4 ft. base, 2 ft. high for 1/4 sec. cor., marked on brass cap $1\frac{1}{4} S 31'$ on W. half and S 32' on E. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
	Pits impracticable.
	Note: On account of natural obstacles, I am unable to set post in the ground.
46.50	Top of sand brush, 50 ft. above wash, bears NE. and SW.
	Leave sandstone bed rock.
61.00	Leave sand brush, enter solid sandstone bed rock.
	Gradually descend.
80.00	Set an iron post, 3 ft. long, 2 in. in dia., 24 in. in the ground for cor. of secs. 29, 30, 31 and 32, marked on brass cap
	$T 24 S 30' m NW,$
	$R 16 E S 29 m NE,$
	$S 32' m SE. and$
	$S 31' m SW. quadrant,$

Subdivision of T. av S., R. 16. E.

chains	
	raise a mound of stone, 3 ft. base, $\frac{1}{2}$ ft. high W. of cor. Pits impracticable. Land, rolling, draining E. Soil, rocky and sandy on rocky sub-soil; $\frac{1}{2}$ ft. rate. No timber. Undergrowth, short sage-brake.
10.00	N. $89^{\circ} 39' E.$ , on random line bet. sec. 29 and 32.
10.00	Set temporary $\frac{1}{4}$ sec. cor. Intersect N. 5 S. line 3 lks. S. of the cor. of sec. 28, 29, 32 and 33. Hence 3 m.
8.00	S. $89^{\circ} 58' W.$ , on true line bet. sec. 29 and 32.
	Over mountainous land. Descend 50 ft. to
2.25	bash, 20 hrs. wide, 3 ft. deep, course N. 5 cho., thence W. Gradually ascend 75 ft. to
27.00	Ridge, bears N. 4 cho. and S.E. Descend abruptly.
31.00	bash in canyon, 10 hrs. wide, 12.5 ft. deep. Course N. Ascend abruptly 1/5 ft. to
40.00	Top of canyon and east side of sand brush, bears N. 5 S. Set an iron post, 3 ft. long, 1 in. mi dia., 26 in. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4} S 29$ on N. half and $S 32$ on S. half, dig pits, $18 \times 18 \times 12$ in., E. & W. of post, 3 ft. dist., raise a mound of earth, $\frac{1}{2}$ ft. base, $\frac{1}{2}$ ft. high N. of cor. Hence across gently rolling sand brush.
66.00	Leave brush, bears N. and S.

Subdivision of T. 24 S., R. 16 E.

Chains.	
	Gradually descend.
73.00	Enter solid sandstone bed rock, bear N. & S.
80.00	The cor. of secs. 29, 30, 31 and 32. Land, mountainous and rolling. E. 40.00 chs. mountainous land draining NW. Soil, rocky on rocky sub-soil, 4 <sup>th</sup> rate. W. 40.00 chs. gently rolling land. soil, sandy and rocky with deep, sand and rock sub-soil; 2 <sup>nd</sup> and 4 <sup>th</sup> rates. No timber.
	Undergrowth, short shadscale.
	Mountainous land 40.00 chs.
40.00	October 16: At this sec. cor., I set off 8° 40' S., on the decl. arc; and at 11 <sup>h</sup> . 46 <sup>m</sup> a.m. l.m.t., observe the sun on the meridian, the resulting lat. is 38° 42'
	S. 89° 59' W., on random line bet. secs. 30 and 31.
40.00	Set temporary $\frac{1}{4}$ sec. cor.
91.20	Intersect W. bdy. of the 7 <sup>th</sup> , 13 <sup>th</sup> lks. S. of the cor. of secs. 25, 30, 31 and 32, heretofore described. Hence I run
	S. 89° 56' E., on true line bet. secs. 30 and 31.
	Over gently rolling brush.
9.00	Leave brush, bear N. & S.
	Descend 125 ft to.
27.00	Enter sandstone bed rock, bear N. & S.
	Gradually descend.
51.20	Point for $\frac{1}{4}$ sec. cor. on solid bed rock, mark + for exact cor. point. Set an iron post, 3 ft. long, 1 in. in dia., 26 lbs. in a mound of stone

Subdivision of T. 24 S., R. 16 E.

Chains	<p>4 ft. base, 2 ft. high for <math>\frac{1}{4}</math> sec. cor., marked on brass cap <math>\frac{1}{4} S</math> <math>30^{\circ}</math> on N. half and <math>S 30^{\circ}</math> on S. half, raise a mound of stone, 2 ft. base <math>1\frac{1}{2}</math> ft. high, N. of cor. Pits impracticable.</p> <p>Note: On account of natural obstacles I am unable to set post in the ground.</p>
63.00	West side box canyon, and ledge 60 ft. high, bears N. $30^{\circ}$ E. and S. descend abruptly.
64.00	Wash, in canyon, 40 lbs. wide, 80 ft. below top, course N. $30^{\circ}$ E. Ascend abruptly over ledge.
65.00	East side of canyon, bears N. $30^{\circ}$ E. and S. Gradually ascend over solid sand- stone bed rock.
91.20	The cor. of secs. 29, 30, 31 and 32. Land, rolling with a general North drain. Soil, rocky and sandy on rock sub-soil; 4 <sup>th</sup> rate. No timber. No undergrowth.
40.00	<p>N. <math>0^{\circ}03'</math> W., bet. secs. 29 and 30. Gradually ascend over solid sandstone bed rock.</p> <p>Sandstone spur, projects W. Point for <math>\frac{1}{4}</math> sec. cor. falls on solid bed rock, mark + for exact cor. point, Set an iron post, 3 ft. long, 1 in. m dia., 26 lbs. in a mound of stone, 4 ft. base, 2 ft. high, for <math>\frac{1}{4}</math> sec. cor., marked on brass cap <math>\frac{1}{4} S 30^{\circ}</math> on W. half and <math>S 29^{\circ}</math> on E. half, raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high W. of cor.</p>

Subdivision of T. 24 S., R. 16 E.

Chamis

Pits impracticable

Note: On account of natural obstacles I am unable to set post in the ground.

Begin steep descent over land facing N.

65.00 Wash in canyon, 50 ft. wide, 140 ft. below 1 $\frac{1}{4}$  cor., coarse NE.

A small seep of good water, up wash, 10 chs.

Ascend abruptly 125 ft. to

78.60 Spur, projects SE.

Descend 15 ft. to

80.00 Set an iron post, 3 ft. long, 2 mis. in dia., 2 $\frac{1}{4}$  mis. in the ground and mound of stone for cor. of secs. 19, 20, 29 and 30, marked on brass cap

T 24 S S 19 in NW,

R 16 E S 20 in NE,

S 29 in SE. and

S 30 in SW. quadrant,

raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high W. of cor.

Pits impracticable

Note: On account of natural obstacles, I am unable to set post more than 12 mis. in the ground.

Land, mountainous.

Soil, rocky on rocky sub-soil; 4<sup>th</sup> rate.

No timber

No Undergrowth

Mountainous land 80.00 chs.

October 16, 1911

October 17: At 7 $\frac{1}{2}$  46<sup>m</sup>. a.m. l.m.t., I set off  $38^{\circ} 45'$  on the lat. arc;  $8^{\circ} 57' S.$ , on the decl. arc; and

Subdivision of T. 24 S., R. 16 E.

Chain	
	determine a meridian with the solar at the cor. of secs. 19, 20, 29 and 30 Hence I run $N. 89^{\circ} 58' E.$ , on random line bet. secs. 20 and 29.
40.00	Set temporary $\frac{1}{4}$ sec. cor.
80.02	Intersect $N. + S.$ line 7 lks. N. of the cor. of secs. 20, 21, 28 and 29. Hence I run $N. 89^{\circ} 59' W.$ , on true line bet. secs. 20 and 29.
26.00	Over broken land draining W. East side of box canyon and ledge 100 ft. high, bears $N. + S.$ . Descend abruptly.
28.50	Bottom of canyon and wash, 125 ft. below top, course N. Ascend abruptly.
30.00	Top of west side of canyon and ledge, 100 ft. high. Bears $N. + S.$ . Gradually ascend.
36.00	Spur, projects N. Descend.
40.01	Set an iron post, 3 ft. long, 1 in. dia., 26 in. in a mound of stone, 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 20 on N. half and S 29 on S. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Post impracticable
	Note: On account of natural obstacles I am unable to set post in the ground.
42.75	East side of canyon, bears NE. and SW.
44.00	Descend abruptly 75 ft. to wash, in canyon, 25 lks. wide, course NE.

Subdivision of T. 24 S., R. 16 E.

Chains	
45.00	Ascend abruptly over ledges. West side of canyon, bears NE. and SW. Hence over broken land draining S.
64.00	Wash, 30 ells. wide, 30 ft. deep, course SE.
72.00	Same wash, course NE. Ascend 50 ft. to
75.50	Sandstone spur, projects S. 1 ch. Descend 50 ft. to
76.50	Same wash, course SE. Ascend 30 ft. to
80.00	The cor. of secs. 19, 20, 29 and 30. Land, mountainous. Soil, rocky on rocky sub-soil, $\frac{4}{4}$ rate. No timber No Undergrowth. Mountainous land 8.00 chs.
80.00	N. $89^{\circ} 56' W.$ , on random line bet. secs. 19 and 30 Set temporary $\frac{1}{4}$ sec. cor.
91.00	Intersect W. bdy. of the tp. 34 ells. S. of the cor. of secs. 19, 24, 25 and 30 heretofore described. Hence I run
	S. $89^{\circ} 43' E.$ , on true line bet. secs. 19 and 30.
30.00	Over rolling sandy land
	Leave sandy land, enter solid sandstone bed rock bears N. + S.
35.50	Wash, 25 ells. wide, 1 ft. deep, course SE.
	Gradually ascend along south side of sandstone bed rock.
51.00	Set a. iron post, 3 ft. long, 1 in. in dia., 26 in. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap

Subdivision of T. 24 S., R. 16 E.

Chains	
	1/4 S. 19 on N. half and S. 30 on S. half, raise a mound of stone 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
71.75	Sandstone spur, projects S. gradually descend 75 ft. to
88.00	Top of 60 ft. ledge bears N. and SW. Descend abruptly 80 ft. to
91.00	The cor. of secs. 19, 20, 29 and 30. Land rolling and mountainous with a general south east drain. Soil, rocky and sandy on rock and gravel sub-soil; 4 <sup>th</sup> rate. No timber. Undergrowth some short shade-calc. Mountainous land, 61 chs.
	Oct. 17: At this sec. cor., I set off 9° 02' S., on the decl. arc; and at 11 <sup>h</sup> . 45 <sup>m</sup> . a.m. l.m.t., observe the sun on the meridian; the resulting lat. is 38° 43'
	No° 03' W., bet. secs 19 and 20. Over mountainous land. Ascend 50 ft. to
1.75	Brush, at head, course SE. Ascend abruptly over south face of solid sandstone break.
19.00	Top of steep ascent and leave solid sandstone, 150 ft. above sec. cor., bears E. and W. Gradually ascend.
34.00	Ridge, bears NE. and SW. Gradually descend.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 in. in a mound of stone, 4 ft. base, 2 ft. high for 1/4 sec. cor., marked on base cap 1/4 S. 19 on W. half and S. 20 on E. half, raise a mound of stone, 2

Subdivision of T. 24 S., R. 16 E.

Chains.

ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable

Note: On account of natural obstacles, I am unable to set post in the ground.

41.50 Wash, 40 eks. wide, 1 ft. deep, course SW.

Gradually ascend 150 ft. to

Top of narrow ridge, bears N.  $70^{\circ}$  E. and S.  $70^{\circ}$  W.

Set an iron post, 3 ft. long, 2 ms. in dia., 24 ms. in the ground for cor. of secs. 17, 18, 19 and 20, marked on brass cap

T 24 S S 18 m NW,

R 16 E S 17 m NE,

S 20 m SE. and

S 19 m SW. quadrant,

dig pits,  $18 \times 18 \times 12$  ms., in each sec.  $5\frac{1}{2}$  ft. dist.; raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land, Mount airous, draining S.

Soil, gravelly and rocky on rocky sub-soil; 4<sup>th</sup> rate.

No timber.

Undergrowth, short shadscale.

Mountainous land, 80.00 chs.

S.  $89^{\circ} 59'$  E., on random line bet. secs. 17 and 20

40.00 Set temporary  $\frac{1}{4}$  sec. cor.

80.12 Intersect. N. + S. line 16 eks. S. of the cor. of secs. 16, 17, 20 and 21. Therein, I run

S.  $89^{\circ} 54'$  W., on true line bet. secs. 17 + 20.

Over mountainous land across solid sandstone bed rock on SE. face of ridge

Subdivision of T. 24 S., R. 16 E.

chainds.

28.00	Ridge spur, projects S. $30^{\circ} W$ . Descend 50 ft. to
32.50	Head of wash, drains SW. Ascend 60 ft. to
37.00	Top of south side of ridge, bears $N. 80^{\circ} E$ . and $S. 80^{\circ} W$ . Hence over rolling land.
40.06	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4} S 17$ on N. half and $S 20$ on S. half, dig pits, $18 \times 18 \times 12$ ins., E. and W. of post, 3 ft. dist., raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
80.12	The cor. of secs. 17, 18, 19 and 20. Land, mountainous and rolling. Soil, rocky and gravelly on rocky sub-soil; 4 <sup>th</sup> rate. No timber Undergrowth, short shadscale Mountainous land on E. 37.00 chs

Having retraced the W. bdy. of the  
tp., and knowing that closing cor.  
will be necessary upon it,  
I run

$N. 89^{\circ} 43' W$ , on true line bet. secs.  
18 and 19.

Gradually descend along top of  
narrow ridge.

6.00 Head of hollow, drains NE.  
Ascend.

8.00 Top of flat ridge, bears N. & S.  
Hence across ridge, near N. side.

28.00 Head of hollow drains NE.

40.00 Set an iron post, 3 ft. long, 1 in.  
in dia., 26 ins. in the ground for  $\frac{1}{4}$   
sec. cor., marked on brass cap  $\frac{1}{4} S 18$  on N. half and  $S 19$  on S. half.

Subdivision of T. 24 S., R. 16 E.

chains.

- dig pits,  $18 \times 18 \times 12$  ins., E. and W. of post, 3 ft. dist., raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high N. of cor. Pits impracticable.
- 43.50 Head of hollow, drains NE.  
86.50 Leave ridge, bears  $71.30^\circ E$ . and  $S. 60^\circ W$ .
- 90.52 Descend 30 ft. to intersect W. bdy. of the tp. 52 lots.  $S. 0^\circ 12' W.$ , of the cor. of secs. 13, 18, 19 and 24 heretofore described. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 18 and 19. Marked on brass cap  
 $T 24 S$  on N. half,  
 $S 13 C C S 24 R 15 E$  on W. half,  
 $S 18$  in N.E. and  
 $R 16 E S 19$  in SE. quadrant,  
 dig pits,  $24 \times 18 \times 12$  ins., on each line, N. and S. 3 ft., and E. of post 7 ft. dist., raise a mound of earth, 14 ft. base, 2 ft. high E. of cor. I destroy all marks on old cor. pertaining to secs. 18 and 19.  
 Land, rolling.  
 Soil, sandy and gravelly on gravelly sub-soil, 2<sup>nd</sup> rate.  
 No timber.  
 Undergrowth, short shadscale.  
 Some grass for grazing.

October 17, 1911

October 18: At 7<sup>h</sup> 46<sup>m</sup> a.m. l.m.t., I set off  $38^\circ 43'$  on the lat. arc,  $9^\circ 19' S.$ , on the decl. arc; and determine a meridian with the solar at the cor. of secs. 17, 18, 19 and 20. Hence I run

Subdivision of T. 24 S., R. 16 E.

chain

- 71.0° 03' W., bet. secs. 17 and 18  
Over mountainous land.  
descend.
- 11.00 Wash, 50 ft. below sec. cor., 20  
lks. wide, course NE.  
Ascend 30 ft. to
- 18.00 Ridge, bears NE. and SW.  
Enter solid sandstone bed rock,  
descend abruptly over N. face  
of ridge.
- 40.00 Point for  $\frac{1}{4}$  sec. cor. falls on  
solid bed rock and steep slope,  
where cor. cannot be set, mark  
+ for exact cor. point.
- 40.53 Set an iron post, 3 ft. long, 1 in.  
in dia., 26 ins. in the ground for  
witness cor. to the  $\frac{1}{4}$  sec. cor.,  
marked on brass cap T 24 S R 16 E  
on N. half, S 17° on E. half, S 18° on  
W. half, with W C  $\frac{1}{4}$  to the south,  
raise a mound of stone, 2 ft. base  
 $\frac{1}{2}$  ft. high W. of cor.  
Pits impracticable.  
Continue to descend.
- 46.00 Head of wash, 25 lks. wide,  
course NW.
- 67.00 Canyon wash, 50 lks. wide, 390 ft.  
below sec. cor., course NE.  
Thence on West side of canyon.
- 70.50 Same wash, course N. 10° W.
- 73.00 Same wash, course NE.  
Ascend over ledge.
- 76.00 Top ledge and rim of San Rafael  
river canyon bears E.  $\rightarrow$  N. 10° W.  
descend abruptly 100 ft. to
- 77.00 Right bank of San Rafael river,  
course N. 80° E.  
Thence across nearly dry channel  
of stream.
- 78.50 Left bank of river, course N. 10° E.

Subdivision of T. 24 S., R. 16 E.

Chains	
80.00	<p>Hence over land subject to overflow      Point for cor. of <math>\frac{7}{1}, \frac{8}{2}, \frac{10}{3}</math> and <math>\frac{12}{4}</math> sec.      falls on swamp land, where cor. cannot      be set.</p> <p>Land, mountainous, draining      N.</p> <p>Soil, rocky on rocky sub-soil; 4<sup>th</sup>      rate.</p> <p>No timber.</p> <p>No Undergrowth.</p> <p>Mountainous land, 80.00 chs.</p>
40.00	<p>N. <math>89^{\circ} 54'</math> E., on random line bet. secs.      8 and 17.</p> <p>Set temporary <math>\frac{1}{4}</math> sec. cor.</p>
80.02	<p>Intersect N. &amp; S. line 3 lks. N. of the      cor. of secs. 8, 9, 16 and 17.</p> <p>Hence I run</p> <p>S. <math>89^{\circ} 55'</math> W., on true line bet. secs. 8      and 17.</p> <p>Over hilly land, draining N.</p> <p>Descend 50 ft. to</p>
2.30	<p>Wash, 30 lks. wide, 3 ft. deep,      course N. <math>30^{\circ}</math> W.</p>
35.40	<p>Wash, 25 lks. wide, 2 ft. deep,      course N.E.</p>
36.25	<p>Wash, 20 lks. wide, 4 ft. deep,      course N.</p>
40.01	<p>Set an iron post, 3 ft long, 1 in.      in dia., 26 in. in the ground for  <math>\frac{1}{4}</math> sec. cor., marked on brass cap  <math>\frac{1}{4} S 8</math> on N. half and <math>S 17</math> on S.      half, raise a mound of stone,      2 ft. base, <math>1\frac{1}{2}</math> ft. high N. of cor.      Pits impracticable</p>
50.00	<p>Wash, 25 lks. wide, 4 ft. deep,      course N.</p>
56.25	<p>Top of ledge and canyon of San      Rafael river, bears N. and S. <math>70^{\circ}</math> W.      Descend abruptly 150 ft. to</p>

Subdivision of T. 24 S., R. 16 E.

chains

- 59.75 Right bank of San Rafael river, at bend, course N.  
Hence up nearly dry channel of river.
- 66.00 Right bank of river, course SE.  
Enter dense willow undergrowth and some cottonwood timber.
- 70.50 Right bank of river, course NE.
- 75.00 Left bank of river, course NE.  
Hence over land subject to overflow.
- 80.02 The true cor. point of secs. 7, 8, 17 and 18.  
Land, hilly with a general N. drain.  
Soil, rocky and clay; 4<sup>th</sup> rate.  
Timber a few cottonwoods on river bottom.  
Undergrowth shadscale and willow.
- October 18: At this station I set off  $9^{\circ} 24' S.$ , on the decl. arc; and at  $11^h 46^m$  a.m. l.m.t., observe the sun on the meridian; the resulting lat. is  $38^{\circ} 44'$ .

- Knowing that closing corners are necessary upon the W. bdy. of the tp., I run  $N. 89^{\circ} 43' W.$ , on true line bet. secs. 7 and 18, from true cor. point of secs. 7, 8, 17 and 18.  
Over level river bottom subject to overflow, through dense undergrowth of willow.
- 1.50 Left bank of San Rafael river, at bend from NE. to SE.  
Hence across nearly dry channel of river.
- 3.75 Right bank of river, course at

Subdivision of T. 24 S., R. 16 E.

Chorus

- bend from NE. to SE.  
 Leave river bottom and  
 underg. south, bears N. & S.  
 Ascend abruptly over ledge.  
 5.00 Spur, 50 ft. high, projects N.  
 Descend 30 ft. to  
 8.20 Wash, 20 lcs. wide, course NE.  
 Ascend abruptly.  
 14.00 Ridge, 175 ft. above river, bears  
 N. and S.  
 Thence over broken land draining  
 N.  
 40.00 175 ft. below ridge  
 Set an iron post, 3 ft. long, 1 in.  
 in dia., 26 ins. in a mound of  
 stone 4 ft. base, 2 ft. high for  $\frac{1}{4}$   
 sec. cor., marked on brass  
 cap  $\frac{1}{4}$  S 7 on N. half and S 18  
 on S. half, raise a mound of  
 stone, 2 ft. base,  $1\frac{1}{2}$  ft. high N.  
 of cor.  
 Pits impracticable.  
 Note: On account of natural obstacles  
 I am unable to set post in the  
 ground.  
 47.25 Top of 50 ft. ledge and S. side of  
 San Rafael canyon, bears NE. and  
 SW.  
 Descend.  
 47.75 Base of ledge, bears NE. and SW.  
 Enter Cottonwood timber and high  
 greasewood undergrowth.  
 Thence over bottom land subject  
 to overflow.  
 58.60 Right bank of San Rafael river,  
 course N. 60° E.  
 Thence across nearly dry channel  
 of stream.  
 61.70 Left bank of river, Course N. 60° E.  
 84.25 Left bank of San Rafael, river,

Subdivision of T. 24 S., R. 16 E.

Chains

course S.

Thence across nearly dry channel  
of stream.

85.78 Right bank of river, course S.

87.00 Leave river bottom, cottonwood  
timber and undergrowth, bars  
NW. and S.

Ascend abruptly 100 ft. over  
ledges to

90.68 Intersect W. bdy. of the tp., 68 lbs.  
S.  $0^{\circ}04'$  E., of the cor. of secs.

7, 12, 13 and 18 heretofore described.  
Set an iron post; 3 ft. long. 2 in.  
in dia., 2 $\frac{1}{4}$  in. in a mound of  
stone 4 ft. base 2 ft. high for  
closing cor. of secs. 7 and 18  
marked on brass cap

T 24 S on N. half.

CC R 15 E S 12 S 13 on W. half,

R 16 E S 7 in NE. and

S 18 in SE. quadrant,  
raise a mound of stone, 2 ft.  
base, 1 $\frac{1}{2}$  ft. high E. of cor.  
It's impracticable.

Note: On account of natural  
obstacles I am unable to set post  
in the ground.

I destroy all marks on old  
cor. pertaining to secs 7 and  
18.

Land, mount aridous and river  
bottom.

Soil, on mount aridous part,  
rocky on rocky sub-soil, 1 $\frac{1}{2}$  rate.  
On river bottom, sandy loam  
with a deep, sand sub-soil; 1 $\frac{1}{2}$   
rate.

Timber, cottonwoods on river  
bottom.

Undergrowth, greasewood.

Subdivision of T. 24 S., R. 16 E.

Chamis

Mountainous or timbered land 90.68 chs.

October 18, 1911

October 19: At 7<sup>h</sup>. 45<sup>m</sup>. a.m. l.m.t., I set off  $38^{\circ}44'$  on the lat. arc;  $9^{\circ}41' S.$ , on the decl. arc; and determine a meridian with the solar at the <sup>true</sup> <sub>cor.</sub> <sup>point</sup> of secs. 7, 8, 17 and 18.

Hence I run

$71.0^{\circ}03' W.$ , bet. secs. 7 and 8.

Over level river bottom, through undergrowth of willow.

1.00 Left bank of San Rafael, river course SW.

Hence across nearly dry channel of stream.

3.00 Right bank of river, course SW.

3.80 Set an iron post, 3 ft. long, 2 in. in dia., 24 in. in the ground for witness cor. to secs. 7, 8, 17 and 18, marked on brass cap.

T 24 S | R 16 E.

S 7 | S 8

WC

S 18 | S 17

dig pits,  $18 \times 18 \times 12$  in., in each sec.,  $5\frac{1}{2}$  ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high W. of cor. Hence over land sloping gently E.

27.00 Right bank of San Rafael river, course E.

Hence across nearly dry channel of stream.

28.50 Left bank of river, course E.

Enter swamp land.

35.75 Leave swamp and willow under-

Subdivision of T. 24 S., R. 16 E.

Chains	
	growth, bears E. and W. Ascend abruptly over ledge.
37.40	Top of ledge 75 ft. high, bears E & E. Gradually ascend.
40.00	Set an iron post, 3 ft. long, 1 mi. in dia., 26 ms. in a mound of stone 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 7° on W. half and S 8° on E. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
	Note: On account of natural obstacles I am unable to set post in the ground.
80.00	Top of low ridge, 60 ft. above $\frac{1}{4}$ sec. cor., bears N. 60° W., and SE. Set an iron post, 3 ft. long, 2 ms. in dia., 24 ms. in the ground for cor. of secs. 5, 6, 7 and 8, marked on brass cap T 24 S 86' in NW., R 16 E S 5' in NE., S 8' in SE. and S 7' in SW. quadrant, dig pits, $18 \times 18 \times 12$ ms., in each sec., $5\frac{1}{2}$ ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high W. of cor. Land, level river bottom on S. 35.75 chs. and rolling brush land draining S. on N. 44.25 chs. Soil, sandy loam and gravelly on sandy and rock sub-soil, $1^{\text{st}}$ and $3^{\text{rd}}$ rates. Timber, a few cottonwoods on S. 35.75 chs. Undergrowth, willow on S. 35.75 chs.

Subdivision of T. 24 S., R. 16 E.

Chains	
	N. 89° 55' E., on random line bet. secs. 5 and 8.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.02	Intersect N. & S. line 2 lks. S. of the cor. of secs. 4, 5, 8 and 9. Hence I run S. 89° 54' W., on true line bet. secs. 5 and 8.
	Gradually descend over rolling land.
9.50	Top of bluff over San Rafael river, bears N. & S. Descend abruptly 60 ft. to
12.00	Base of bluff, bears N. & S. Enter dense willow undergrowth and cottonwood timber. Hence across bottom land.
20.20	Right bank of San Rafael river, course N. Hence across nearly dry channel of stream.
24.25	Left bank of river, course N.
25.00	Leave bottom land, timber and undergrowth, bears N. and S. Ascend abruptly over ledge.
25.25	Top of ledge, bears N. 35° W., and S. 35° E. Hence over broken land draining south.
40.01	Set an iron post, 3 ft. long, 1 in. in dia.; 26 in. the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 5° on N. half and S. 8° on S. half, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable
53.50	Ridge, 70 ft. high, bears N. & S. Gradually descend.
69.50	Wash, 15 lks. wide, 2 ft. deep course SW.

Subdivision of T. 24 S., R. 16 E.

chain	
74.00	Wash, 20 lks. wide, 1 ft. deep, course SE. Ascend 30 ft. to the cor. of secs. 5, 6, 7 and 8. Land, rolling Soil, gravelly, sandy and rocky on rocky sub-soil, 3 <sup>rd</sup> rate. Lumber, a few cottonwoods on river bottom. Undergrowth, willow on river bottom.
	October 19: at this sec. cor., I set off $9^{\circ} 46' S.$ , on the decl. arc; and at 11 h. 45 m. a.m. l.m.t., observe the sun on the meridian, the resulting lat. is $38^{\circ} 45'$
19.00	Knowing that closing cor. are necessary upon the W. bdy. of the tp., I run $71.89^{\circ} 43' W.$ , on true line betw. secs. 6 and 7. Over rolling land draining S. Sandstone spur, 75 ft. above sec. cor., bears S.
28.50	Descend 50 ft. to Wash, 15 lks. wide, 2 ft. deep, course S.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 2 <sup>1</sup> / <sub>2</sub> in. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 6 on N. half and S 7 on S. half, dig pits, 18 x 18 x 12 in., E. and W. of post, 3 ft. dist., raise a mound of earth $3\frac{1}{2}$ ft. base, 1 <sup>1</sup> / <sub>2</sub> ft. high N. of cor.
50.25	Wash, 20 lks. wide, 5 ft. deep, course S. Gradually ascend.

Subdivision of T. 24 S., R. 16 E.

Chains

66.00	Enter solid sandstone bed rock, bears N. and S.
70.00	Leave solid sandstone, bears N. and S.
90.66	Intersect W. bdy. of the tp., 92 lks. S. of the cor. of secs. 1, 6, 7 and 12 heretofore described. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 6 and 7, marked on brass cap
	T 24 S on N. half, CC R 15 E S 1' S 12 on W. half, R 15 E S 6 in NE. and S 7 in SE. quadrant, dig pits, 24 x 18 x 12 ins., crosswise on each line, N. and S., 3 ft. and E. of post, 7 ft. dist.; raise a mound of earth 4 ft. base, 2 ft. high E. of cor. destroy all marks on old cor. pertaining to secs. 6 and 7. Land hilly with a general S. drain. Soil, sandy, gravelly and rocky on sandy and rock sub-soil; 2 and 4 <sup>th</sup> rates. No timber. Undergrowth, short shadscale.

Knowing that closing cor. are  
necessary upon the N. bdy. of  
the tp., I run

77.0° 03' W., on true line bet. secs.  
5 and 6.

over hilly land, draining SE.

descend 30 ft. to

Mash, 20 lks. wide, 2 ft. deep,  
course SE.

Gradually ascend S. face of bank.

Subdivision of T. 24 S., R. 16 E.

chains.

- 35.50 Top of accent and sandy brush, 175 ft. above sec. cor., bears E. and W.  
Hence over sandy brush land.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 mts. in the ground for 1/4 sec. cor., marked on brass cap 1/4 S 6 on W. half and S 5 on E. half, dig pits,  $18 \times 18 \times 12$  mts., N. and S. of post 3 ft. dist., raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high W. of cor.
- 79.88 Intersect N. bdy. of the tp. 27.0 chs., S. 89° 45' E., of the cor. of secs. 5, 6, 31 and 32 heretofore described  
Set an iron post, 3 ft. long, 2 mts. in dia., 24 mts. in the ground for closing cor. of secs. 5 and 6, marked on brass cap:
- CCT 73 SR 16 E S 31 S 32 on N. half,  
S 5 in SE. and  
S 6 in SW. quadrant.  
dig pits,  $24 \times 18 \times 12$  mts., crosswise on each line, E. and W., 3 ft., and S. of post, 7 ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high S. of cor.  
Destroy all marks on old cor. pertaining to secs. 5 and 6.  
Land, level and hilly.  
S. 35.50 chs. hilly land sloping S.  
N. 44 38 chs. level brush land.  
Soil, sandy and gravelly; a <sup>nd</sup> rate  
No timber  
Undergrowth, short shadscale.  
Some good grass for grazing on  
N. 44, 38 chs.

October 19, 1911

Meanders, T 24 S., R. 16 E.

Meanders of right bank of Green river, down stream.

I commence at the meander cor. of fract. secs. 1 and 6 on the E. bdy. of the tp., heretofore described. At this cor., October 20. At 7<sup>h</sup> 45<sup>m</sup> a.m. l. m. t., I set off  $38^{\circ} 45'$  on the lat. arc;  $10^{\circ} 03' S.$ , on the decl. arc, and determine a meridian with the solar.

Hence I run with meanders in sec. 1.

Over rocky land on top ledge bank.

100 ft. high.

S.  $77^{\circ} 30' W.$ , 6.40 chs. Bank 150 ft. high

S.  $66^{\circ} 15' W.$ , 16.70 chs., Bank 75 ft. high.

S.  $18^{\circ} 30' W.$ , 17.00 chs., At 9.70 chs., Wash, 25  
lks. wide, course E.

S.  $20^{\circ} 45' W.$ , 6.00 chs.; At 50 lks., descend  
from ledge 50 ft. high  
to meander cor.  
fract. secs. 1 and 12.

Land, rolling.

Soil, rocky; 4<sup>th</sup> rate

No timber.

No Undergrowth.

Hence in sec 12.

Over sandy bank, through dense willow brush, and scattering Cottonwood timber.

S.  $34^{\circ} 15' W.$ , 74.20 chs. At 35.00 Wash, 50 lks.  
wide, 5 ft. deep, course E.  
At 70 chs. bear timber.  
and undergrowth  
ascend ledge 120 ft.  
high.

S.  $18^{\circ} 15' W.$ , 13.00 chs., Along top ledge, 100  
ft. high.

S.  $9^{\circ} 15' W.$ , 6.29 chs., To meander cor.  
fract. secs. 12 and 13.

Meandere, T. 24 S., R. 16 E.

chain.

Hence in sec. 13.

On top ledge bank 100 ft. high.

S.  $4^{\circ} 00'$  E., 18.00 chs. At N.E. mouth of  
canyon, 1 ch. wide,  
course E

Top ledge 150 ft. high

S.  $23^{\circ} 30'$  E., 37.00 chs. At 35 chs. Descend from  
ledges.

S.  $31^{\circ} 00'$  E., 12.20 chs. Through heavy  
willow undergrowth

S.  $15^{\circ} 15'$  E., 10.30 chs.

S.  $3^{\circ} 30'$  W., 7.27 chs. To meander cor.  
frac. secs. 13 & 24.

Land, level and mountainous.

Soil, rocky and sandy;  $1^{\text{st}}$  rate  
No timber.

Undergrowth, willow.

Hence in sec. 24.

October 20: At the meander cor. of  
frac. secs. 13 and 24, I set off  $10^{\circ} 08'$   
S., on the decl. arc; and at  $11^{\text{h}} 45^{\text{m}}$   
a.m. l.m.t., observe the sun on  
the meridian; the resulting lat. is  
 $38^{\circ} 43'$ .

Through scattering cottonwood  
timber and dense willow under-  
growth.

S.  $15^{\circ}$  W., 900 chs.,

S.  $49^{\circ} 30'$  W., 9.20 chs.,

S.  $73^{\circ}$  W., 11.00 chs.,

N.  $83^{\circ} 30'$  W. 9.40 chs. At 6.40 chs. wash,  
15 eks. wide, course S.

To meander cor.

frac. secs. 23 and 24

Land, level.

Soil, sandy;  $1^{\text{st}}$  rate

Timber, some cottonwoods

Undergrowth, willow.

# Meadows, T. 24 S., R. 16 E.

chains.

Hence in sec. 23.

Over stony bank at base of ledges.

S.  $81\frac{1}{4}^{\circ}$  W., 12.50 chs.

S.  $72^{\circ}$  W., 13.00 chs.,

S.  $48\frac{1}{4}^{\circ}$  W., 10.50 chs.,

S.  $22\frac{3}{4}^{\circ}$  W., 12.00 chs.,

S.  $40^{\circ}$  W., 8.70 chs. At 750 chs. mouth  
of three canyons and  
wash, ch. wide course  
E.

S.  $28^{\circ}$  E., 7.00 chs.

S.  $78^{\circ}$  E., 35.06 chs., descend over ledges.  
1700 feet - 15 ft. wide, course N.  
to meander cor.

fract. secs. 23 and 24  
16.68 chs.  $71.0^{\circ} 01' W.$  of  
cor. of secs. 23, 24, 25  
and 26.

Land, level and mountainous.

Soil, rocky; 4<sup>th</sup> rate.

No timber

Undergrowth, willow.

Hence in sec. 24.

Over rocky bank, descending over  
ledges.

N.  $57\frac{1}{2}^{\circ}$  E., 54.00 chs.

N.  $46^{\circ}$  E., 27.00 chs., Enter dense  
willow undergrowth.

N.  $81^{\circ}$  or E., 15.30 chs., to meander cor.

fract. secs. 19 and  
24 on the E. bdy.  
of the tp.

Land, mountainous and level.

Soil, rocky and sandy loam; 4<sup>th</sup>  
and 1<sup>st</sup> rates.

No timber

Undergrowth, willow

October 20, 1911

At the meander cor. of fract. secs. 15-

Meanders, T. 24 S., R. 16 E.

Chorus:

and 30 on the E. bdy. of the tp.  
October 21: At this cor. I set off  
 $38^{\circ} 42'$  on the lat. arc;  $10^{\circ} 25' S.$  on the  
decl. arc, <sup>at 7<sup>h</sup> 45<sup>m</sup> a.m. P.M.T.</sup> and determine a meridian  
with the solar.

Thence I run with meanders in sec.  
25.

over rocky bank.

S.  $51^{\circ}$  W., 28.00 chs. Begin ascent  
over ledges.

At 12 chs. right bank of  
river bears S.  $39^{\circ}$  E. 3 chs.  
dist.

18.00 Top ledges bear N.E.  
and S.  $51^{\circ}$  W. river 200  
ft. below.

At 28 chs. river bears  
S.  $39^{\circ}$  E. 7 chs. dist.

S.  $5^{\circ}$  W., 24.00 chs. On top ledges.

At 15 chs. right bank of  
river bears S.  $85^{\circ}$  E. 5 chs.

At 19.00 chs. wash, 30 ft.  
wide, course E.

S.  $13\frac{1}{2}^{\circ}$  E., 13.00 chs. At 6 chs. right bank  
of river, bears N.  $76\frac{1}{2}^{\circ}$  E.  
5 chs.

S.  $30\frac{1}{2}^{\circ}$  E., 13.70 chs. At 5 chs. right bank  
of river bears N.  $59\frac{1}{2}^{\circ}$  E.  
6.00 chs.

To witness cor. to  
meander cor. of fract.  
secs. 25 and 36.

Land, mountainous  
Soil, rocky;  $\frac{1}{4}$  <sup>th</sup> rate

No timber.

No Undergrowth.

Thence in sec. 36.

over rocky bank on top of ledge  
200 ft. high

205

Meanders, T. 24 S., R. 16 E.

Chamis.

S.  $47^{\circ}$  E., 1900 chs. At 10 chs., right bank of river bears N  $43^{\circ}$  E., 6 chs. dist. To witness cor. to meander cor. of fract. secs. 31 and 36 on the E. bdy. of the tp.

Liquid, mountainous.

Soil, rocky; 4<sup>th</sup> rate.

No timber.

No Undergrowth.

Meanders of left bank of Green river, up stream.

I commence at the meander cor. of fract. secs. 25 and 30, 75.90 chs.

S. of the cor. of secs. 19, 24, 25 and 30.

Hence I run with meanders in sec. 25.

Through dense willow undergrowth.

N.  $52\frac{1}{4}^{\circ}$  W., 6.00 chs.,

N.  $25^{\circ}$  W., 12.00 chs.,

N.  $11\frac{1}{2}^{\circ}$  W., 9.90 chs.,

N.  $7\frac{1}{2}^{\circ}$  E., 12.50 chs.,

N.  $22^{\circ}$  E., 6.50 chs.,

N.,  $35^{\circ}$  E., 9.00 chs.,

N.  $53^{\circ}$  E., 3.01 chs., To meander cor.

fract. secs. 25 and 30.

Land, level.

Soil, sandy loam; 1<sup>st</sup> rate.

No timber.

Undergrowth, willow.

Hence in sec. 24.

Over rocky bank on top ledge 100 ft. high

S.  $87^{\circ}$  W., 14.00 chs.

Meanders, T. 24 S., R. 16 E.

S.  $51^{\circ}$  W., 45.00 chs. along top of ledges.  
At 40 chs. leave ledge  
enter dense willow  
undergrowth.

S.  $57^{\circ} 02'$  W., 37.00 chs., to meander cor  
fract. secs. 23 + 24  
28.10 chs. N.  $0^{\circ} 01'$  W.  
of cor. of secs. 23, 24  
25 and 26.

Land, mountainous and level.  
Soil, rocky and stony; 4<sup>th</sup> rate.  
No timber  
Undergrowth, willow.

October 21: At this meander cor.,  
I set off  $10^{\circ} 29'$  S., on the decl. arc;  
and at 11<sup>h</sup>. 45<sup>m</sup>. a.m. l.m.t.,  
observe the sun on the meridian;  
the resulting lat. is  $38^{\circ} 43'$

Hence in sec. 23.

Through dense willow undergrowth  
and some cottonwood timber

N.  $71\frac{1}{4}$  W., 3.90 chs.

S.  $79\frac{1}{4}$  W., 11.00 chs.,

N.  $70^{\circ}$  W., 9.40 chs.,

N.  $41^{\circ}$  W., 6.00 chs.,

N.  $15\frac{1}{4}$  W., 6.50 chs.,

N.  $15^{\circ}$  E., 2.00 chs.,

N.  $36^{\circ}$  E., 10.00 chs.,

N.  $59^{\circ}$  E., 8.20 chs.,

S.  $81\frac{1}{4}$  E., 15.70 chs., begin ascent  
over ledges.

To meander cor.  
fract. secs. 23 + 24  
53.30 chs., N.  $0^{\circ} 01'$  W.,  
of the cor. of secs.  
23, 24, 25 and 26.

Land, level and mountainous.  
Soil, sandy and rocky; 4<sup>th</sup> rate  
Timber a few cottonwoods  
Undergrowth, willow.

25

Meanders, T. 24 S., R. 16 E.

House in Sec. 24.

On top ledge bank, 100 ft. high  
East, 19.30 chs.,

N. 49° E., 10.60 chs.,

N. 50 1/2° E., 17.50 chs.

N. 4° W., 9.00 chs., Descend abruptly over  
ledge

4.00 chs., base of ledge  
brass SW + N. 50° E.

Enter dense willow  
undergrowth.

To meander cor.

fract. secs. 13 and 24.

Land, level and mountainous  
Soil, rocky and sandy; 4<sup>th</sup> rate  
No timber

Undergrowth, willow.

October 21, 1911

October 23: At 7<sup>h</sup> 45<sup>m</sup>. a.m. b.m.t.  
I set off 38° 43' on the lat. arc; 11° 07'  
S., on the decl. arc; and determine  
a meridian with the solah at  
the meander cor. of fract. secs.  
13 and 24.

Hence I run with meanders in  
sec. 13.

Through dense willow undergrowth  
and scattering Cottonwood timber.

N. 1° 15' W., 10.00 chs.,

N. 18 1/4° W., 3.20 chs.,

N. 22° W., 14.00 chs.,

N. 33° W., 33.00 chs., at 22.00 chs. wash

30 lks. wide,  
course W.

N. 11 1/2° W., 9.70 chs.,

N. 6 1/4° E., 5.00 chs.,

N. 11 1/2° E., 12.10 chs., To meander  
cor. fract. secs.  
13 and 13.

Meanders, T. 24 S., R. 16 E.

chain

Land, level.  
Soil, sandy loam; 1<sup>st</sup> rate  
Timber, Cottonwood.  
Undergrowth, willow.

Hence in sec. 12.

Through scattering Cottonwood  
timber.

N.  $22^{\circ} 30' E.$ , 15.70 chs.,<sup>at 5 chs.</sup> wash, 25 lks.  
wide course W.  
Leave timber,  
enter ledge 20 ft.  
high.

At 10.00 chs. wash,  
25 lks. wide,  
course W.

N.  $25 \frac{1}{2}^{\circ} E.$ , 14.00 chs.,

N.  $38 \frac{3}{4}^{\circ} E.$ , 20.30 chs.,

N.  $30 \frac{3}{4}^{\circ} E.$ , 29.00 chs., At 9.50 chs., wash,  
20 lks. wide,  
course W.

N.  $9^{\circ} 15' E.$ , 12.40 chs., descend from  
ledge.

4 chs. enter dense  
willow undergrowth.  
To meander cor.  
frac. secs. 1 and  
12.

Land, level.

Soil, gravelly and rocky; 4<sup>th</sup> rate  
Timber, some cottonwood  
Undergrowth, willow.

October 23: At this meander cor., I  
set off  $11^{\circ} 12' S.$ , on the decl. arc;  
and at  $11^{\circ} 45' S.$  a.m. l.m.t.,  
observe the sun on the meridian;  
the resulting lat. is  $38^{\circ} 45'$ .

Hence in sec. 1

Through dense willow undergrowth

Meanders, T. 24 S., R. 16 E.

and scattering cottonwood timber.

N.  $20^{\circ} 30' E$ , 11.30 ches.,

N.  $33^{\circ} 15' E$ , 8.00 ches.,

N.  $56^{\circ} W E$ , 7.60 ches.,

N.  $67^{\circ} 45' E$ , 9.10 ches., to meander cor.

of fract. sec. 1 and 16.

In the E. bdy. of the

sp.

Flood, level.

Soil, sandy loam; 1<sup>st</sup> rate.

Timber, scattering cottonwood.

Undergrowth, willow.

October 23, 1911

## General Description.

This township contains two varieties of land, broken mountainous and level bottom lands; and the soil ranges from sandy loam to rocky. The soil of the bottom lands along the Green and San Rafael rivers, is generally a rich sandy loam and can be classed as 1<sup>st</sup> rate, while that of the remaining part of the township is rocky and sandy and can be classed as 4<sup>th</sup> rates.

Some cottonwood timber is found along the Green and San Rafael rivers, while on the mountainous portion only a short growth of shadscale grows and in many instances, vegetation of no kind exists.

The township is well watered by the Green river which flows through the eastern part of the township in a southerly direction and by the San Rafael river which flows through the northern part in an easterly direction.

In the fall of the year the San Rafael river is usually dry but during the remaining part of the year carries about 3 ft. of water. This township is used chiefly for winter grazing of sheep.

There are no settlers in this tp. There are no indications of mineral or oil in the township.

Howard W. Miller  
U. S. Transit Man.

## CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability,  
Howard Wm. Miller, U. S. Surveyor, during the periods and in the capacities  
stated opposite our several signatures, in surveying all those parts or portions of T. 13 N., S. bdy.,  
E. bdy and east east of the N. bdy. of T. 11 S., R. 14 E.,  
subdivision of T. 11 S., R. 14 E., W. bdy. T. 23 S., R. 25 E., Subdivision and Meanders  
of T. 23 S., R. 25 E., Subdivision and Meanders T. 23 S., R. 24 E., N., W., E.,  
and S. boundaries T. 24 S., R. 16 E., Subdivision and Meanders of  
T. 24 S., R. 16 E.; N., E., and South boundaries of T. 24 S., R. 17 E.,  
and subdivision of T. 24 S., R. 17 E.  
of the Salt Lake Base and Meridian, in the State of Utah.

which are represented in the foregoing field notes as having been executed by him, and under his direction; and that said survey has been, in all respects, to the best of our knowledge and belief, well and faithfully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	
John J. Sharpe	July 5, 1911	July 19, 1911	meander man
William Smith	August 10, 1911	September 20, 1911	meander man
Harvey Keatton	August 9, 1911	September 20, 1911	flagman as man
Andrew Wimmer	September 25, 1911	October 29, 1911	meander man flagman
Carl Ray	April 1, 1911	October 31, 1911	Chairman
Fred Wright	May 19, 1911	October 31, 1911	Chairman

Subscribed and certified to before me on the dates of the final service as shown above.

Howard Wm. Miller  
U. S. Surveyor.

TRANSITMAN.  
FINAL OATH OF UNITED STATES SURVEYOR.

I, Howard W. Miller, U.S. Transitman, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for ..... Utah .....  
Bearing date of the 27 day of March 1911, I have well, faithfully, and truly,  
in my own proper person, and in strict conformity with said instructions, the Manual of Surveying  
Instructions, and the laws of the United States, surveyed all those parts or portions of the West,  
resurvey of S. and E. bds., retracement Ed St. Par. S. and retracement S.  
Surveyor's notes, T.11 S., R.14 E.; subdivision T.11 S., R.14 E.; W.  
Surveyor's notes, and meanders T.23 S., R.25 E.; subdivision and meander  
line T.23 S., R.24 E.; retrace and resurvey R. & S. bds. and sub-  
division S., R.16 E. .... of the Salt Lake.....  
Lake and Meridian, in the State of Utah, which are represented in  
the foregoing field notes having been executed by me, and under my direction; and I do further  
solemnly swear that all the corners of said survey have been established and perpetuated in strict accord-  
ance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor  
General for Utah, and in the specific manner described in the field notes, and that  
the foregoing are the original field notes of such survey.

Howard W. Miller  
U. S. Transitman

Subscribed by said Howard W. Miller, and sworn to before me  
this 28 day of May, 1912

James H. Tracy  
U. S. Surveyor-General

for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 14, 1914.

The foregoing field notes of the survey of Subdivision and Meander lines in  
Township No. 24 South, Range No. 16 East of the Salt Lake Base and  
Meridian, Utah

executed by Howard W. Miller

under his special instructions dated March 27, 1911, having been  
critically examined and the necessary corrections and explanations made, the said field notes, and the  
surveys they describe, are hereby approved.

James H. Tracy  
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in  
the office of the Surveyor General has been correctly copied from the original notes on file in this office.

U. S. Surveyor General.

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Book "H"

# FIELD NOTES

OF THE SURVEY OF THE

EAST AND SOUTH BOUNDARIES

AND

REPLACEMENT AND RESURVEY OF THE NORTH BOUNDARY

OF

TOWNSHIP 24 SOUTH, RANGE 17 EAST

Of the SALT LAKE BASE AND Meridian,

In the State of U.T.A.H.

EXECUTED BY

HOWARD W. MILLER

Transitman

In the capacity of U.S. Surveyor<sup>A</sup>, under instructions dated March 27, 1911,  
issued by the United States Surveyor General to govern surveys included in  
Group No. 11, which were approved by the Commissioner of the General Land  
Office, April 20, 1911, pursuant to authority contained in the Act of  
Congress dated , 1911.

Survey commenced October 25, 1911.

Survey completed October 27, 1911.

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5-74-74

## INDEX DIAGRAM.

Township 24 South Range 17 East

2	5	7	9	10	12	14
6	5	4	3	2	1	
7	8	9	10	11	12	15
18	17	16	15	14	13	17
19	20	31	22	23	24	19
30	29	28	27	26	25	20
31	32	33	34	35	36	22
36	28	30	32	33	35	

Retracement and Resurvey of the North boundary of T. 24 S., R. 11 E.

Chains.

Survey commenced October 23, 1911  
and executed with a W. & L. E. Gilkey  
solar compass No 1043.

For description and test of instrument  
see book "A" of this survey.

I examine the adjustments of the  
instrument and correct the level  
and collimation errors, then, to  
test the solar apparatus by comp-  
aring its indications resulting from  
solar observations made during  
p.m. and a.m. hours with a  
meridian established by observations  
on Polaris. I proceed as follows;  
Having observed Polaris at the cor.  
of T. 23 and 24 S., R. 16 and 17 E., and  
knowing that the meridian is  
correct, I do not make another  
observation.

At the cor. of T. 23 and 24 S., R. 16 and  
17 E., latitude  $38^{\circ} 46' N.$ , longitude  $110^{\circ} 07'$   
 $22'' W.$ , I set off  $38^{\circ} 46'$  on the lat. arc,  
 $11^{\circ} 14' S.$  on the decl. arc; and at  $4^{\text{h}}$   
 $15^{\text{m}}. p.m. l.m.t.$ , determine with the  
solar a meridian; this meridian  
agrees with the Polaris meridian of  
September 24.

October 23, 1911.

October 24: At  $7^{\text{h}} 45^{\text{m}}. a.m. l.m.t.$ ,  
I set off  $38^{\circ} 46'$  on the lat. arc;  $11^{\circ} 28' S.$   
on the decl. arc; and determine a  
meridian with the solar; which  
meridian also agrees with the Polaris  
meridian; therefore, I conclude that  
the adjustments of the instrument  
are satisfactory.

From the tp. cor. already described  
I run

Retracement and Resurvey of the North boundary of T. 24 S., R. 17 E.

chains.

East, retracing bet. secs. 6 & 31.

Over hilly land draining SE.,  
through short undergrowth of  
shadscale.

Ascend 40 ft. to

15.00 Flat ridge, bears N. & S.

Descend 35 ft. to

28.25 Wash, 1.5 lks. wide, course S.  $30^{\circ}$  E.

Ascend 30 ft. to

31.00 Ridge, bears N. & S.

Descend 50 ft. to

38.68 Fall of lks. S. of the  $\frac{1}{4}$  sec. cor.,  
which is a sandstone,  $9 \times 12 \times 5$  ins.  
above ground, firmly set and  
marked and witnessed as described  
by the Surveyor General.

I destroy all traces of the old cor.  
and reestablish it at the same point  
as follows:

Set an iron post, 3 ft. long, 1 in. in  
dia., 26 ins. in the ground for  $\frac{1}{4}$   
sec. cor., marked on brass cap  $\frac{1}{4}$   
S. 31 on N. half and S. 6 on S. half,  
raise a mound of stone, 2 ft. base,  
 $\frac{1}{2}$  ft. high N. of cor.

Pits impracticable

The true bearing of this line is  
N.  $89^{\circ} 54'$  E., and the distance is 38.68 chs.  
From the  $\frac{1}{4}$  sec. cor. I continue

East.

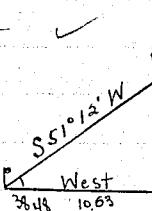
10.40 Intersect the meander cor. of fract.  
secs. 6 and 31, which is a sandstone  
 $16 \times 12 \times 6$  ins., above ground, firmly  
set and marked and witnessed as  
described by the Surveyor General.

To determine the distance across  
Green river, I set a flag on left bank  
and also erect a signal at this  
meander cor., from flag on left  
bank I measure a base line

Retracement and Resurvey of the North boundary of T. 24 S.R. 17

chains.

N.  $13^{\circ}$  W., 7.40 cha. dist., to a point from which flag bears S.  $51^{\circ} 12'$  W., from the flag the N. end of the base bears N.  $51^{\circ} 12'$  E. By separate measurement of each angle they are found to be respectively,  $38^{\circ} 48'$ ,  $64^{\circ} 12'$  and  $77^{\circ} 00'$ . I therefore compute the distance across river as follows:



$$\log \sin. 64^{\circ} 12' = 9. 954396 - 10$$

$$\text{colog sin. } 38^{\circ} 48' = 0. 203007$$

$$\log 7.40 \text{ cha} = .869232$$

$$\log 10.63 \text{ cha} = 11. 036635 - 10$$

$10.63$  cha +  $10.40$  cha makes

21.03 To left bank of Green river.

After careful search I am unable to find any trace of the old meander cor.

Set temp. Meander cor. for fract. secs. 6 and 31.

40.10 Intersect the cor. of secs. 5, 6, 31 and 32 which is a sandstone  $7 \times 7 \times 14$  ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General.

I destroy all traces of the old cor. and reestablish it at the same point as follows.

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for reestablished cor. of secs. 5, 6, 31 and 32 with brass cap marked

T 23 S	R 17 E
S 31	S 32
S 6	S 5
T 24 S	

1911

dig pits,  $18 \times 18 \times 12$  ins. in each sec.

24  
Retracement and Resurvey of the North boundary of T. 24 S.

chains	
	5 ft. dist., raise a mound of earth. 4 ft. base, 1 ft. high W. of cor. Hence I run
19.07	West, resurveying bet. secs. 6 and 31 Over nearly level land through high greasewood undergrowth. Left bank of Green river. Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for meander cor. of fract. secs. 6 and 31, with brass cap marked.
	<p>T 23 S R 17 E MC ————— S 31  ————— S 6 T 24 S R 17 E 1911</p>
29.70	dig pit, 36 x 36 x 12 ins., E. of post 8 ft. dist., raise a mound of earth 4 ft. base, 2 ft. high E. of cor. The meander cor. of fract. secs. 6 and 31 on the right bank of Green river. I renew marks on stone and rebuild accessories to cor. Enter hilly land. Ascend 25 ft. to
36.10	Ridge, bears N. and S. Descend 15 ft. to
37.00	wash, 6 lcs. wide, coarse S. Ascend 15 ft. to
40.10	The 1/4 sec. cor. bet. secs. 6 and 31 Land, hilly and level. W. 49.08 chs. hilly land with general SE. drain. Soil, gravelly and rocky; 4 th. rate. Undergrowth short shadecake, no timber. E. 19.07 chs. nearly level land. Soil, sandy and sandy loam with deep sand sub-soil; 1st. rate

Retracement and Resurvey of the North boundary of T. 24 S., R. 17

chains.

No timber  
Undergrowth, greasewood.

From the cor. of secs. 5, 6, 31 and 32 East, retracing btr. secs. 5 and 32 over gently rolling sandy land through undergrowth of greasewood.

3. 50 Enter channel of Red Wash, 125 chs. wide, 3 ft. deep, course S.  $70^{\circ}$  W.

14.00 Wire fence across wash, bears N. and S.

19.60 Leave wash, turns SE.

23.60 Wire fence bears N. 1 ch. and S.  $35^{\circ}$  E.  
Leave greasewood undergrowth.

26.80 Wash, 30 lks. wide, course S.  $30^{\circ}$  W.  
Begin ascent over sandstone ledges.  
40.02 Top of solid sandstone spur,  
projects S.

Fall 6 lks. S. of the  $\frac{1}{4}$  sec. cor.,  
which is a sandstone,  $26 \times 16 \times 6$  ins.  
firmly set in a mound of stone  
and marked and witnessed as  
described by the Surveyor General.  
I destroy all traces of the old cor.  
and reestablish it at the same  
point as follows:

Set an iron post, 3 ft. long, 1 in. in  
dia.,  $2\frac{1}{4}$  ins. in a mound of stone,  
4 ft. base, 2 ft. high for reestablished  
 $\frac{1}{4}$  sec. cor., with brass cap marked

S 32

$\frac{1}{4}$

S 5

1911

raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high N. of cor.

Note: On account of natural obstacles  
I am unable to set post in the  
ground

Retracement and resurvey of the north boundary of T. 24 S., R. 1.

Chains

The true bearing of this line is  $77^{\circ}89'55'' E.$ , and the distance is 40.01 chs.

From the  $\frac{1}{4}$  sec. cor. I continue East.

Descend from spur, over ledges.

5.75 Wash in hollow, 20 lks. wide, 60 ft. deep, coarse S.

Ascend 60 ft. over ledges to Spur, projects S.

Gradually descend over small washes and spurs draining S.

36.50 Wash, 15 lks. wide in hollow, coarse SW.

39.83 Fall 6 lks. S. of the cor. of secs. 4, 5, 32 and 33 which is a sandstone  $15 \times 14 \times 6$  ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General.

I destroy all traces of the old cor. and reestablish it at the same point as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in a mound of stone and earth, 4 ft. base, 2 ft. high for reestablished cor. of secs. 4, 5, 32 and 33 with brass cap marked.

T 2 <sup>3</sup> S	R 17 E
S 32	S 33
S 5	S 4
T 2 <sup>4</sup> S	

19-11.

raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.

Note: On account of natural obstacles, I am unable to set post in the ground. The true bearing of this line is  $77^{\circ}89'55'' E.$ , and the distances is 39.83 chs.

Redacement and resurvey of the north boundary of T. 24 S., R. 17 E.

chains

Land, rolling and mountainous.  
Soil, sandy and rocky; 11 th. rate  
Undergrowth greasewood on W. 23.60  
chs. and shadcale on E. 56.25 chs.  
Mountainous land 53.05 chs.

East, retracing bet. secs. 11 and 33.  
Over broken land draining S., through  
short undergrowth of Shadcale.  
ascend

- 5.00 Spur, projects S.  
Gradually descend  
22.00 Wash, 15 lks. wide, coarse S.E.  
Gradually ascend.  
10.12 Fall of lks. S. of the  $\frac{1}{4}$  sec. cor.  
which is a sandstone, 8 to 12 x 7 mis.  
above ground, firmly set, and  
marked and witnessed as described  
by the Surveyor General.  
Destroy all traces of the old cor.  
and reestablish at the same point as  
follows:

Set an iron post, 3 ft. long, 1 in. in dia.,  
24 mis. in the ground for reestablished  
 $\frac{1}{4}$  sec. cor with brass cap & marked

S. 33

$\frac{1}{4}$  S.

S. 1

19.11

raise a mound of stone, 2 ft. base,  
1 $\frac{1}{2}$  ft. high N. of cor.

The true bearing of this line is  
77.89° 52' E., and the distance is 10.12 chs.  
From the  $\frac{1}{4}$  sec. cor. I continue  
East.

- 7.00 Sandstone ridge, bears N.E. and S.E.  
descend.  
10.00 Wash, 10 lks. wide, coarse S.E.  
ascend.

Retracement and resurvey of the north boundary of T. 24 S., R. 1.

Chances

- 16.00 Ridge, bears N. and S.  
Descend  
25.75 Wash, 15 lks. wide, course S.  $35^{\circ}$  W.  
Ascend.  
37.75 Spur, projects SW.  
Descend  
39.80 Small wash, course SW.  
Gradually ascend.  
40.30 Fall 31 lks. N. of the cor. of secs. 3, 4,  
33 and 34 which is a sandstone, 11x  
15 x 6 ins. above ground, firmly set  
and marked and witnessed as  
described by the Surveyor General.  
I destroy all traces of the old cor. and  
reestablish it at the same point as  
follows.

Set an iron post, 3 ft. long, 3 ins. in  
dia., 24 ins. in the ground for reestablished  
cor. of secs. 3, 4, 33 and 34, with  
brass cap marked

T 23' S	R 17' E
S 33	S 34
S 4	S 3
T 24 S	
	19 11'

raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high W. of cor.

The true bearing of this line is S.  $89^{\circ}33' E.$ ,  
and the dist. is 40.30 chs.

Land, hilly with a general S. drain.  
Soil, gravelly and rocky on rocky  
sub-soil; 4 th. rate.

No timber.

Undergrowth, short shadscale.

October 24: At this sec. cor., I set off  
 $11^{\circ}33' S.$ , on the decl. arc; and at  $11^{\circ}44' 11''$  A.M. L.M.T., observe the sun on  
the meridian; the resulting lat. is

Retracement and resurvey of the north boundary of T. 24 S., R. 1

Chains.

$38^{\circ} 46'$

East, retracing bet. secs. 3 and 34.  
Over broken hilly land draining  
SW., through short undergrowth  
of shalecale.

14.00 Dragon road, from Green river, Utah,  
to Moab, Utah, bears N. and S.

25.00 Low ridge, bears NW. and SE.  
Ascend.

29.50 Wash, 15 lks. wide, course N.  
Ascend

33.00 Spur. projects N.  
Ascend

39.00 Wash, 15 lks. wide, course N.  $35^{\circ}$  W.  
Gradually ascend.

40.00 Fall 10 lks. S. of the  $\frac{1}{4}$  sec. cor.,  
which is a sandstone  $9 \times 12 \times 10$  ins.  
above ground, firmly set and  
marked and will retrace as described  
by the Surveyor General.

① destroy all traces of the old cor.  
and reestablish it at the same  
point as follows:

Set an iron post, 3 ft. long, 1 in. in  
dia., 2½ ins. in the ground for  
reestablished  $\frac{1}{4}$  sec. cor., with brass  
cap marked

S 34  
 $\frac{1}{4}$

S 3

1911

raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high N. of cor.

The true bearing of this line is  
 $71.89^{\circ} 51' E.$ , and the distance is 40.00 chs.  
From the  $\frac{1}{4}$  sec. cor., ② continue  
East.

39.00 Spur, projects S.

Retracement and recovery of the north boundary of T. 24 S., R. 17 E.

Chancery

Decreed.

110.00 Fall 8 lks. S. of the cor. of secs. 2, 3, 34 and 35 which is a sandstone 10x8x4 ins. above ground, firmly set and marked and will reseed as described by the Surveyor General.

I destroy all traces of the old cor. and reestablish it at the same point as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 2½ ins. in a mound of stone and earth, 4 ft. base, 2 ft. high, for reestablished cor. of secs. 2, 3, 34 and 35 with brass cap marked

T 23 S	R 17 E
S 34	S 35
S 3	S 2
T 24 S	
	1911

raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor.

Note: On account of natural obstacles I am unable to set post in the ground. The true bearing of this line is N. 89° 53' E., and the distance is 40.00 cha.

Land, hilly

Soil, gravelly and rocky on rocky sub-soil; 4 th. rate.

No timber.

Undergrowth, short shadcale.

East, retracing bet. secs. 2 and 35  
descend over mountainous land  
through short undergrowth of  
shadcale.

9.00 Wash, 30 lks. wide, course SE.

10.18 Wash, 110 lks. wide, course S.  
Ascend 50 ft. to

Retracement and resurvey of the north boundary of T. 24 S., R. 17 E.

chains

13.50	Ridge, bears N.E. and S.W. S. 75 lks. is a sandstone pinnacle 75 ft. high. Descend.
21.00	Hollow, 40 ft. deep, course S.W. Ascend
25.00	Spur, projects S. Descend 50 ft. to
29.50	Wash in canyon, 60 lks. wide, course S. Ascend 50 ft. to
39.00	Ridge, bears N.E. and S. Descend.
40.65	Fall 19 lks. S. of the $\frac{1}{4}$ sec. cor., which is a sandstone $14 \times 10 \times 7$ ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General. I destroy all traces of the old $\frac{1}{4}$ sec. cor. and reestablish it at the same point as follows: Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for reestablished $\frac{1}{4}$ sec. cor., with brass cap marked
	$S\frac{3}{5}$ $\frac{1}{4}$ <hr/> $S\frac{2}{1}$ 1911
	raise a mound of stone, 2 ft. base, $\frac{1}{4}$ ft. high N. of cor. The true bearing of this line is N. 89° $14'$ E., and the distance is 40.65 chs. From the $\frac{1}{4}$ sec. cor. I continue East.
41.75	Hollow, drains S. Ascend 20 ft. to
40.75	Spur, projects S. Descend 25 ft. to
43.75	Hollow, drains S.

Retracement and resurvey of the north boundary of T. 24 S., R.

Chancery

	Ascend 75 ft to -
37.80	Sandstone spur, projects S.
	Descend 35 ft. to
40.75	Fall 58 lks. S. of the cor. of secs. 1, 2, 35 and 36 which is a sandstone $10 \times 12 \times 6$ ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General. I destroy all traces of the old cor. and reestablish it at the same point as follows:
	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for reestablished cor. of secs. 1, 2, 35 and 36 with brass cap marked
	$\begin{array}{c c} T23 S & R17 E \\ \hline S35 & S36 \\ \hline S2 & S1 \end{array}$ <p>T 24 S</p> <p>1911</p>
	raise a mound of stone, 2 ft. base, $\frac{1}{4}$ ft. high W. of cor.
	The true bearing of this line is N. 89° 10' E., and the distance is 40.75 chs. Land, mountainous with a general S. drain.
	Soil, rocky on rocky sub-soil; 4 th. rate.
	No timber
	Undergrowth, short shadscale. Mountainous land 81.60 chs.
	East, retracing bet. secs. 1 and 36. Over mountainous land.
	Descend 10 ft. to
0.75	Wash, 20 lks. wide, course S..
	Begin ascent over solid sandstone.
35.00	Sandstone spur, 300 ft. above wash. Projects SE.

Retracement and resurvey of the north boundary of T. 24 S., R. 1.

Chains

41.05

Descend abruptly 125 ft. to  
fall 74 lks. S. of the  $\frac{1}{4}$  sec. cor.  
which is a + on solid sandstone  
bed rock and marked and witnessed  
as described by the Surveyor General.  
The true bearing of this line is  
 $N 88^{\circ} 58' E.$ , and the distance is 41.06 chs.  
From the  $\frac{1}{4}$  sec. cor. I continue  
East.

5.00

Continue steep descent.  
Base of sandstone ridge, 75 ft. below  
 $\frac{1}{4}$  sec. cor., bears N. and S.

Hence over rolling sandy land.

37.95

Fall 3.36 chs. N. of the cor. of Ts. 23  
and 24 S., Rs. 17 and 18 E. which is a  
sandstone  $11 \times 9 \times 8$  ins. above ground,  
firmly set, with marks obliterated  
and witnessed by light traces of  
pits.

I destroy all traces of old cor. and  
reestablish it at the same point as follows:  
Set an iron post, 3 ft. long, 3 ins. in dia.,  
24 ins. in the ground for reestablished cor.  
of Ts. 23 and 24 S., Rs. 17 and 18 E., with  
Brass cap marked

T. 23 S.

R 17 E	R 18 E
S 36	S 31
S 1	S 6
R 17 E	R 18 E

T 24 S

1911

Dig pits  $24 \times 24 \times 12$  ins. on each  
line, E., W. and N. 4 ft., and S. of  
post. 8 ft. dist., raise a mound of  
earth,  $5\frac{1}{2}$  ft. base  $2\frac{1}{2}$  ft. high S.  
of cor.

The true bearing of this line is  
 $S. 84^{\circ} 56' E.$ , and the distance is

Retracement and resurvey of the north boundary of T. 24 S., R.

claims

38.10 chs.

Land mountainous and gently rolling.

Soil, sandstone bed rock and sandy; 4th. and 2nd. rates.

No timber.

Undergrowth, short shadscale.

Good grass for grazing on E. 37.95 chs.

Mountainous land .46.05 cha.

October 24, 1911.

East boundary T. 24 S., R. 17 E.  
Survey commenced October 25, 1911  
and executed with a W. & S. E.  
Gurley solar compass No. 10.43.  
I know the instrument to be in  
perfect adjustment by tests made  
on a Polaris meridian October  
23, 1911.

October 25: at  $7^{\text{h}}\ 44^{\text{m}}$ . a.m. l.m.t.,  
I set off  $38^{\circ}46'$  on the lat. arc;  $11^{\circ}49'$   
S. on the decl. arc; and determine  
a meridian with the solar at  
the cor. of Ts. 23 and 24 S., Rs 17 and  
18 E.

Hence I run

South, bet. secs. 1 and 6

Gradually ascend over gently  
rolling sandy land, through  
short undergrowth of shadscale.

Wagon road from Green river tidal  
to Moab, Utah, bears E. and W.  
A distance equal to the length of  
the W bdy. of sec. 6. minus the  
southing of the N. bdy. of the tp.  
Set an iron post, 3 ft. long, 1 in. in  
dia., 24 ins. in the ground for 1/4

East boundary T. 24 S., R. 17 E.

chains

sec. cor., with brass cap marked.

$S 1 \frac{1}{4}$  |  $S 6$

1911

dig pits,  $18 \times 18 \times 12$  ins., N. and S. of post, 3 ft. dist., raise a mound of earth,  $3\frac{1}{4}$  ft. base,  $1\frac{1}{2}$  ft. high W. of cor.

78.10 Set an iron post, 3 ft. long, 3 ins. in dia.,  $2\frac{1}{4}$  ins. in the ground for cor. of secs. 1, 6, 7 and 12 with brass cap marked.

T 24 S

R 17 E	R 18 E
$S 1$	$S 6$
$S 12$	$S 7$

1911

dig pits,  $18 \times 18 \times 12$  ins. in each sec.  $5\frac{1}{4}$  ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high W. of cor.

Land, rolling, draining N.E.

Soil, sandy and gravelly; 2nd rate.

Sub-soil, hard gravel.

No timber.

Undergrowth, short shadscale.

Good grass for grazing.

South, bet. secs. 7 and 12.

Gradually ascend over hilly land through short undergrowth of shadscale.

17.00 Top of ascent, bears E. and S.W. Begin descent across solid sandstone bed rock, and through scattering scrub cedar and pinon.

24.00 Hollow, 50 ft. deep, drains E.

Ascend 30 ft. to

28.00 Spur, projects E.

East boundary of T. 24 S., R. 17 E.

Chains

- 10.00 On solid sandstone bedrock.  
Set an iron post, 3 ft. long, 1 in. in dia., 2 1/4 ins. in a mound of stone and earth, 1 ft. base, 2 ft. high for 1/4 sec. cor. with brass cap  
marked
- |       |     |
|-------|-----|
| S 124 | S 7 |
| 1/4   |     |
- 1911
- raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.  
Note: On account of natural obstacles, I am unable to set post in the ground.  
Descend abruptly 150 ft. towards Ten Mile Canyon.
- 53.75 North side of Ten Mile canyon, bears NE. and SW.  
Enter scattering cottonwood timber and greasewood under-growth.
- 56.00 Wash in Ten Mile canyon, 1.50 ch. wide, some alkali water, coarse S.E.
- Ascend from canyon.
- 61.75 Sandstone spur, 75 ft. high, projects W. 1 ch.  
Descend abruptly.
- 68.50 Base of spur, bears S.E. and W. Hence gradually ascend in bottom of canyon.
- 72.10 Wash in canyon, 30 lks. wide, coarse N.W.
- Ascend along west side of wash.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 2 1/4 ins. in the ground for cor. of secs. 7, 12, 13 and 18, with brass cap marked

East boundary T. 24 S., R. 17 E.

chains.

	T 24 S
R 17 E	R 18 E
S 12	S 7
S 13	S 18
	1911

Dig pits, 18 x 18 x 12 ins. in each sec. 5 1/2 ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high W. of cor.

Rand rolling and mountainous. N. 17. chs. rolling brush land with a general NE. drain. Soil, sandy and gravelly; 2nd rate. Sub-soil, gravelly and rocky, very poor. Undergrowth short shadscale. No timber. Good grass for grazing.

S 63. chs. rough mountainous land draining to Ten mile canyon. Soil, rocky; 4 th. rate. Sub-soil, rocky. Timber, scattering scrub cedar and piñon, some cottonwoods on creek bottom. Undergrowth greasewood in canyons.

Rand mountainous heavily timbered and covered with dense undergrowth, 63.00 chs.

South, bet. secs. 13 and 18. Over mountainous land draining N.

4.00 Ascend 60 ft. from canyon to top of canyon, bears N. 30° W. and SE.

Hence over land sloping E.

22.50 Enter solid sandstone bed rock, bears NW. and E. 2 chs. and base of sandstone ledge.

Ascend abruptly.

24.00 Top of ledge, 100 ft. high, bears

East boundary of T. 24 S., R. 17 E.

chain

N.W. and E. 2 cho.

Gradually ascend.

26.40 Sandstone ridge, bears N.W. & S.E.

Chase over land draining E.

Descend 30 ft. to

1 29.20 Hollow, drains E.

Ascend.

1/10.00 On solid sandstone bed rock.

Set an iron post, 3 ft. long, 1 in. in dia., 2 $\frac{1}{4}$  in. in a mound of stone, 4 ft. base, 2 ft. high for 1 $\frac{1}{4}$  sec. cor. with brass cap. marked

S 13 $\frac{1}{4}$  | S 18

1911

raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high W. of cor.

Note: On account of natural obstacles, I am unable to set post in the ground.

1/13.00 Sandstone spur, projects E.

Descend 50 ft. to

1/18.50 Hollow, drains E.

Ascend 40 ft. to

52.90 Spur, projects E.

Descend 50 ft. to

68.00 Hollow, drains E.

Ascend 75 ft. to

77.80 Spur, projects E.

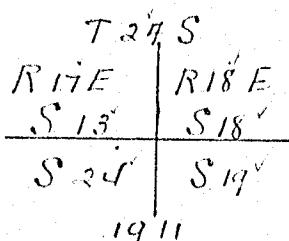
Descend 30 ft. to

80.00 On solid sandstone bed rock.

Set an iron post, 3 ft. long, 3 in. in dia., 2 $\frac{1}{4}$  in. in a mound of stone and earth, 4 ft. base, 2 ft. high, for cor. of secs. 13, 18, 19 and 24, with brass cap marked

East boundary of T. 24 S., R. 17 E.

chains.



raise a mound of stone, 2 ft. base,  
1 1/2 ft. high W. of cor.

Note: On account of natural  
obstacles, I am unable to set post in  
the ground.

Land, mountainous, draining  
N. on N. 22. 50 chs. and E. on S.  
57. 50 chs.

Soil, rocky on rocky sub-soil.  
4 ch. rate.

No timber.

No undergrowth.

Mountainous land 80.00 chs.

Oct. 35: At this sec. cor. I set off  
11° 54' S., on the decl. arc; and at  
11° 44' m. a.m. l.m. t., observe the  
sun. on the meridian; the  
resulting lat. is 38° 1/3'

South, bet. secs. 19 and 24.

Even broken mountainous land  
across solid sandstone out-  
croppings.

- |       |  |
|-------|--|
| 20.10 | Wash, 20 lks. wide, 3 ft. deep,<br>drains N. 80° W.  |
| 21.20 | Wash, 20 lks. wide, 3 ft. deep,<br>drains NW.  |
| 24.00 | Wash, 15 lks. wide, 3 ft. deep,<br>drains NW.  |
| 11.00 | Set an iron post, 3 ft. long, 1 in. in<br>dia., 24 ins. in the ground for 1/4<br>sec. cor., with brass caps marked<br>S 24 1/4   S 19<br>19 11 |

East boundary of T. 24 S., R. 17 E.

chains.

- raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high W. of cor.  
 Ascend 35 ft. to.  
 5000 Ridge, bears E. and W.  
 Descend 30 ft to.  
 52.50 Wash, 15 lks. wide, 3 ft. deep,  
 drains W.  
 Ascend 70 ft. to  
 74.10 Ridge, bears E. and W.  
 Descend 50 ft. to  
 8000 Set an iron post, 3 ft. long, 3 ins.  
 in dia., 24 ins. in a mound of  
 stone and earth, 4 ft. base, 2 ft.  
 high for cor. of secs. 19, 24, 25  
 and 30 with brass cap marked

T 24 S

R 17 E	R 18 E
S 24	S 19
S 25	S 30

1911

raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high W. of cor.

Note: On account of natural  
 obstacles I am unable to set post  
 in the ground.

Land, mountainous with a  
 general drain to the West.

Soil, rocky and gravelly; 4th. rate  
 Sub-soil, rocky, very poor.

Undergrowth, some short shadscale.  
 Timber, a few scattering cedar.

Some good grass for grazing.

Mountainous land 8000 ft.

South, bet. secs. 25 and 30.

Over mountainous land, through  
 deep sand, scattering sandstone  
 outcroppings and some cedar  
 and piñon timber.

East boundary of T. 24 S., R. 17 E.

Chains	
29.0	Wash, 15 lks. wide, 3 ft. deep, drains W.
19.90	Wash, 15 lks. wide, 5 ft. deep, drains NW. Ascend 25 ft. to
28.60	Sandstone spur, projects W. 2 chs. Descend 30 ft. to
35.90	Wash, 15 lks. wide, 10 ft. deep, drains NW. Ascend
40.00	Set an iron post, 3 ft. long, 1 in. in dia, 24 in. in the ground for $\frac{1}{4}$ sec. cor. with brass cap marked $S 25\frac{1}{2}^{\circ}$   $S 30^{\circ}$ 1911
	dig pits, 18 x 18 x 12 ins, N. and S. of post, 3 ft. dist., raise a mound of earth, $3\frac{1}{2}$ ft. base, 1 ft. high (W. of cor.).
	Continue to ascend
56.00	Ridge, 75 ft. above $\frac{1}{4}$ sec. cor., brds. E. and W.
	Descend 100 ft. to
71.00	Wash, 15 lks. wide, 5 ft. deep, drains W.
	Ascend abruptly 75 ft. to
79.00	Top of sandstone ridge, bears NE. and SW.
80.00	Descend abruptly 50 ft. over ledges to set an iron post, 3 ft. long, 3 in. in dia, 24 in. in a mound of stone and earth, 14 ft. base, 2 ft. high for cor. of secs. 25, 30, 31 and 36 with brass cap marked

T 24 S

R 17 E	R 18 E
S 25	S 30
S 36	S 31

1911

East boundary of T. 24 S., R. 17 E.

chains

raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high W. of cor.

Note: On account of natural  
 obstacles, I am unable to set post  
 in the ground.

Land mountainous with a general  
 west drain.

Soil, rocky and sandy; 1st and 2nd.  
 rates.

Sub-soil, gravelly and rocky.

Undergrowth, some short shadscale.

Timber, scattering scrub cedar.

Some good grass for grazing.

Land mountainous heavily timbered  
 or covered with dense undergrowth  
 8.00 chs.

October 25, 1911

October 26: At 7<sup>h</sup>. 44<sup>m</sup>. a.m. l.m.t.,  
 I set off  $38^{\circ} 42'$  on the lat. arc;  $12^{\circ} 10'$   
 S., on the decl. arc; and determine  
 a meridian with the solar at the  
 cor. of secs. 25, 30, 31 and 36.

Thence I run

South, bet. secs. 31 and 36.

Over rolling mountainous land  
 through scattering forest of scrub  
 cedar and pinon.

Gradually ascend across solid  
 sandstone bed rock.

Leave bed rock, bears E. and W.  
 Ascend through heavy sand and  
 shadscale undergrowth.

22.40 Top of ridge, 125 ft. above sec.  
 cor. Bears E. and W.

Gradually descend.

40.00 Set an iron post, 3 ft. long, 1 in. in  
 dia.; 24 in. in the ground for  
 $\frac{1}{4}$  sec. cor., with brass cap

East boundary of T. 24 S., R. 17 E.

chains

marked

S 36 1/4 | S 31

1911

dig pits, 18 x 18 x 12 ins., N. and S. of post 3 ft. dist., raise a mound of earth, 3 1/4 ft. base, 1 1/4 ft. high W. of cor.

- 48.00 Enter solid sandstone bed rock, bears E. and W.
- 69.00 Leave solid sandstone bed rock, bears, E. and W.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 2 1/4 ins. in the ground, for cor. of T. 24 and 25 S., R. 17 and 18 E., with brass cap marked

T 24 S

R 17 E	R 18 E
S 36	S 31
S 1	S 6
R 17 E	R 18 E
T 25 S	

1911

dig pits, 2 1/4 x 2 1/4 x 12 ins., on each line, E., W. and N. 4 ft., and S. of post, 8 ft. dist., raise a mound of earth, 5 ft. base, 2 1/2 ft. high S. of cor.

Land, mount aridous with a general drain to the east.

Soil, sandy and rocky; 2nd and 4th rates.

Sub-soil, hard gravel.

Timber, scattering cedar and pinon. Undergrowth, short shadscale.

Good grass for grazing.

Land mount aridous heavily timbered or covered with dense undergrowth 8.00 acs.

South boundary of T. 24 S., R. 17 E.

Chains.

October 26, 1911.

West, on a random line, along the South boundary of the tp. setting temp.  $\frac{1}{4}$  sec. cor. and sec. cor. at intervals of 40.00 chs.

120.00 At this station, October 26, I set off  $12^{\circ} 15'$  S. on the decl. arc; and at  $11^{\text{h}} 44^{\text{m}}$  a.m. l.m.t., observe the sun on the meridian; the resulting lat. is  $38^{\circ} 41'$

240.00 Cease work.

October 26, 1911

October 27: at  $7^{\text{h}} 44^{\text{m}}$  a.m. l.m.t., I set off  $38^{\circ} 41'$  on the lat. arc;  $12^{\circ} 30'$  S. on the decl. arc; and determine a meridian with the solar at this station.

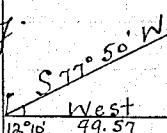
Hence I continue West.

364.00 Left bank of Green river. Set temp. meander cor. for fract. secs. 5 and 32. Being unable to obtain a base line at this point to triangulate across river, I place my transit on the random line at a point 356.77 chs. W. of the cor. of T3.24 and 25 S., R17 and 18 E. I now set a flag on line on left bank of river and also one on Ten Mile Point about a mile west. Note: It will be impracticable to chain from the Green river to Ten Mile Point, on account of steep sandstone bed rock and high ledges. I now measure a base line N.  $2^{\circ} 30'$  E. 10.80 chs. [This is the largest base line I am able to secure and be able to see my flag on the left bank of Green river] From this point my flag on left bank of river bears S.  $77^{\circ} 50'$  W., from the flag the

South boundary of T. 24 S., R. 17 E.

chains

N. end of the base bears  $77^{\circ} 50' E$ .  
By separate measurement of each angle they are found to be respectively.  
 $92^{\circ} 30'$ ,  $75^{\circ} 20'$ ,  $12^{\circ} 10'$ . I compute the distance as follows.



$$\log \sin 75^{\circ} 20' = 9.985613 - 10$$

$$\text{colosin } 12^{\circ} 10' = 0.676210.$$

$$\log 10.80 \text{ chs} = \underline{1.033421}$$

$$\log 49.57 \text{ chs} = 11.695247 - 10$$

$49.57 \text{ chs} + 356.77 \text{ chs}$  makes

406.34 To left bank of Green river. Set temp meander cor. for fract. secs. 6 and 31. I now triangulate to Ten mile point. From my point on random line 356.77 chs. W. of cor. of T. 24 and 25 S., R. 17 and 18 E., I measure a base line  $77.2^{\circ} 30' E.$ , 30.50 chs. to a point from which flag bears  $S. 69^{\circ} 49' W.$  From the flag the N. end of the base bears  $77.69^{\circ} 19' E.$  By separate measurement of each angle they are found to be respectively.  $92^{\circ} 30'$ ,  $66^{\circ} 49' 20^{\circ} 41'$ . I compute the distance as follows.

$$\log 30.50 \text{ chs} = 1.484300$$

$$\log \sin 66^{\circ} 49' = 9.963434 - 10$$

$$\text{colosin } 20^{\circ} 41' = \underline{0.451976}$$

$$\log 79.38 \text{ chs} = 11.899710 - 10$$

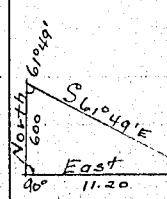
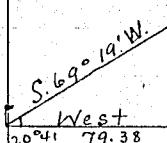
$79.38 \text{ chs} + 356.77 \text{ chs}$  makes

436.15 To Ten mile point

447.14 Left bank of Green river. Set temp meander cor.

To determine distance across river

I set a flag on right bank and also erect a flag at this point. From my flag on right bank I measure a base line North, 6 chs. to a point from which flag on left bank bears  $S. 61^{\circ} 49' E.$  From the flag the N. end of the



South boundary T. 24 S., R. 17 E.

chain no.	
	base bears N. $61^{\circ} 49'$ W., therefore tan. $61^{\circ} 49' \times$ base or $1.86 \cdot 630 \times 6 = 11.20$ also also 447.14 makes
458.34	To right bank of Green river. Set temp. meander cor.
479.74	Intersect W. bdy. of the tp. 14 lks. S. of the cor. of Ts. 24 and 25 S., Rs. 16 and 17 E. heretofore described. The falling answers to a correction of $0^{\circ} 01'$ , or $2\frac{1}{3}$ lks. per mile counting from the S.E. cor. of the tp.; therefore I run S. $89^{\circ} 59'$ E., bet. secs. 6 and 31. Over rough mountainous land on S. side of canyon. Ascend abruptly 50 ft. over ledges and boulders to
4.00	Spur, projects NW. Descend over ledges towards Green river.
15.50	Top of perpendicular sandstone ledge 40 ft. high, bears NW. and S.
16.00	Base of ledges, 150 ft. below spur, and mouth of water canyon, wash, ch. wide, drains SE. Enter dense willow undergrowth and bottom lands of Green river.
21.40	Right bank of Green river. Set an iron post, 3 ft. long, 3 in. in dia., 2 $\frac{1}{4}$ ins. in the ground for meander cor. of fract. secs. 6 and 31 with brass cap marked.
	$T 24 S R 17 E$ $\overline{S 31} \quad   \quad MC$ $S 6$ $T 25 S, R 17 E$ 1911 dig pit, 36 x 36 x 12 ins., W. of post 8 ft. dist., raise a mound of earth

South boundary of T. 24 S., R. 17 E.

Chains

- 32.60 4 ft. base, 2 ft. high W. of cor.  
left bank of Green river.  
Set an iron post, 3 ft. long, 3 in. in dia., 24 in. in the ground for  
Meander cor. fract. secs. 6 and 31  
with brass cap marked.
- T 24 S R 17 E  
MC / S 31  
S 6
- T 25 S R 17 E  
1911
- raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high E. of cor.  
Leave river bottom, ascend abruptly  
over high ledges.
- 37.00 Top of high ledges, 190 ft. above river  
bear NE. and SE.  
Hence gradually ascend across  
Ten mile point
- 39.74 Set an iron post, 3 ft. long, 1 in. in dia.,  
24 in. in a mound of stone, 4 ft. base  
2 ft. high for  $\frac{1}{4}$  sec. cor. with brass  
cap marked.
- S 31  
—  
 $\frac{1}{4}$   
—  
S 6
- 1911
- raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$   
ft. high N. of cor.
- Note: On account of natural obstacles  
I am unable to set post in the ground.  
Top of ridge on Ten mile point and  
point of triangulation, bear NE.  
and SW.
- 43.59 Left bank of Green river.  
Set an iron post, 3 ft. long, 3 in. in dia., 24 in. in a mound of stone  
and earth, 4 ft. base, 2 ft. high for  
Meander cor. of fract. secs. 6 and 31
- 73.40

South boundary of T. 24 S., R. 17 E.

chains.

with brass cap marked

T 24 S. R 17 E.

S 31 / MC

S 6

T 25 S. R 17 E.

1911

raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.

Note: On account of natural obstacles, I am unable to set post in the ground.

The cor. of secs. 5, 6, 31 and 32 falls in Green river.

Land mountainous and level.

Level land 5.40 chs. on Green river.

Soil, sandy loam on rich sandy loam sub-soil; 1st. rate. Undergrowth dense willow. Good grass for grazing.

Rough mountainous land on 68.00 chs.

Soil, rocky; 4 th. rate. Sub-soil rocky. No timber. No undergrowth.

Land, mountainous heavily timbered or covered with dense undergrowth 73.40 chs.

October 27: At this cor. I set off  $12^{\circ} 35'$  S. on the decl. arc; and at 11<sup>h</sup>. 44<sup>m</sup>. a.m. l.m. t., observe the sun on the meridian; the resulting lat. is  $38^{\circ} 41'$ .

East, bet. secs. 5 and 32, Counting distances from true cor. point.

36.00

left bank of Green river.

Set an iron post, 3' ft. long, 3 ins. in dia., 24 ins. in a mound of stone and earth, 4 ft. base, 2 ft high for meander cor. of fract. secs. 5 and 32 with brass cap marked.

South boundary of T. 24 S., R. 17 E.

chain

T 24 S R 17 E  
 MC  $\diagdown$  S 32  
 S 5  
 T 25 S R 17 E  
 1911

raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high. E. of cor.

Note: On account of natural obstacles I am unable to set post in the ground.

Ascend abruptly over rocky ground facing W.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 in. in a mound of stone 4 ft. base, 2 ft. high, for  $\frac{1}{4}$  sec. cor. with brass cap marked

S 32  
 $\frac{1}{4}$   
 —————  
 S 5

1911

raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high N. of cor.

Note: On account of natural obstacles I am unable to set post in the ground.

Ascend abruptly over ledge 75 ft. to Point of triangulation and rocky ridge, 120 ft. above  $\frac{1}{4}$  sec. cor., bears N. and S.

47.00 Top of perpendicular sandstone ledge, 75 ft. high and west side of Ten Mile canyon, bears N. and S.  
 Descend abruptly over ledges into Ten Mile canyon.

75.25 Bottom of Ten Mile canyon and wash, 1 ch. wide, some alkali water, 500 ft. below ridge, course S.  
 Ascend.

80.00 Set an iron post, 3 ft. long, 3 in. in

South boundary of T. 24 S., R. 17 E.

chains

dia., 24 in. in a mound of stone and earth, 4 ft. base, 2 ft. high for cor. of secs. 4, 5, 32 and 33 with brass cap marked.

T 24 S R 17 E	
S 32	S 33
S 5	S 4
T 25 S	

1911

raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.

Note: On account of natural obstacles I am unable to set post in the ground. Land, mountainous draining S. Soil, rocky on rocky sub-soil; 4 th. rate.

No timber.

No undergrowth.

Mountainous land 44.00 chs.

	S. $89^{\circ} 59'$ E., bet. secs. 4 and 33.
	Over rough mountainous land.
	Ascend abruptly over ledges from Ten mile canyon.
4.00	Top of west side of flat ridge, 100 ft. above sec. cor., bears N. and S. gradually asc.
10.00	Leave brush, bears N. and S.
	Descend abruptly over ledges.
22.40	Hollow, 150 ft. deep, drains N.
	Ascend abruptly over ledges.
30.00	Spur, 150 ft. above hollow, projects NW.
	Note: S. 10 lks. is a huge sandstone pinnacle 150 ft. high.
	Descend 50 ft. to
35.70	Hollow, drains NW.
	Ascend abruptly over ledges, 125 ft. to
40.00	Set an iron post, 3 ft. long, 1 in. in

South boundary of T. 24 S., R. 17 E.

chains

dia., 24 ins. in a mound of stone  
and earth, 4 ft. base, 2 ft. high for  
1/4 sec. cor. with brass cap marked

S 33<sup>r</sup>

$\frac{1}{4}$

S 4<sup>r</sup>

1911

raise a mound of stone, 2 ft. base,  
1 1/2 ft. high N. of cor.

Note: On account of natural obstacles,  
I am unable to set post in the ground.

- 41.00 Rocky ridge, bears N. and S.  
Gradually descend across bench.
- 50.10 Top of perpendicular sandstone  
ledge, 40 ft. high and west side of  
deep canyon, bears N. and S.  
Descend abruptly 250 ft. over ledges.
- 55.80 Wash in canyon, 20 lks. wide,  
course N.  
Ascend 75 ft. to
- 57.40 Spur, projects N. & a chs.  
Descend 50 ft. to
- 58.80 Wash in canyon, 20 lks. wide,  
course NW.  
Ascend abruptly over ledges from  
canyon.
- 65.40 Top of ledges and east side of  
canyon, 275 ft. above base, bears  
NW. and SE.  
Gradually ascend.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in  
dia., 24 ins. in a mound of stone  
and earth, 4 ft. base, 2 ft. high for  
cor. of secs. 3, 4, 33 and 34 with  
brass cap marked.

T 24 S R 17 E

S 33	S 34
------	------

S 4 <sup>r</sup>	S 3 <sup>r</sup>
------------------	------------------

T 25 S

1911

202

South boundary of T. 24 S., R. 17 E.

chains.	<p>raise a mound of stone, 2 ft. base,  <math>1\frac{1}{2}</math> ft. high W. of cor.</p> <p>Note: On account of natural obstacles      I am unable to set post in the ground.      Land, mountainous draining N.      Soil, rocky on rocky sub-soil; 4 th.      rate.</p> <p>No timber.</p> <p>Undergrowth, some short shadscale.      Mountainous land 80.00 cha.</p>
3.00	<p>S. <math>89^{\circ} 59'</math> E., bet. secs. 3 and 34.</p> <p>Gradually ascend over rolling      mountainous land, through short      undergrowth of shadscale.</p> <p>Low ridge, bears N. and S.</p> <p>Gradually descend.</p>
13.30	<p>Hollow, 25 ft. deep, drains N.</p> <p>Ascend.</p>
14.00	<p>Enter scattering forest of scrub      cedar and pinon, bears N. and S.</p>
40.00	<p>Set an iron post, 3' ft. long, 1 in. in.      dia., 24 ins. in the ground for <math>\frac{1}{4}</math>      sec. cor. with brass cap marked</p> <p style="text-align: center;"><math>S\ 34</math>  <math>\frac{1}{4}</math></p> <hr/> <p style="text-align: center;"><math>S\ 3</math></p> <p style="text-align: center;">1911</p>
41.00	<p>raise a mound of stone, 2 ft. base,  <math>1\frac{1}{2}</math> ft. high N. of cor.</p> <p>Enter solid sandstone bed rock,      bears N. and S.</p> <p>Ascend 75 ft to</p>
49.60	<p>Sandstone spur, projects NW.</p> <p>Descend 25 ft. to</p>
52.00	<p>Hollow, drains NW.</p> <p>Ascend 50 ft to.</p>
56.00	<p>Sandstone ridge, bears N. and S.</p> <p>Descend 50 ft. to</p>

South boundary of T. 24 S., R. 17 E.

chains.	
63.30	Hollow, drains NE. Hence over land facing N.
68.20	Hollow, drains N.
	Ascend 35 ft. to
72.90	Spur, projects N.
	Descend 35 ft. to
77.00	Hollow, drains NW.
	Ascend 30 ft to
80.00	Solid sandstone spur, projects NW. Set an iron post, 3 ft. long, 3 in. in dia., 24 in. in a mound of stone, 4 ft. base, 2 ft. high for cor. of secs. 2, 3, 34. and 35 with brass cap marked.
X	T 24 S R 17 E S 34   S 35 ----- S 3   S 2 T 25 S 1911
	raise a mound of stone, 2 ft. base, 1/4 ft. high W. of cor.
	Note: On account of natural obstacles I am unable to set post in the ground. Land, mountainous, draining N. Soil, gravelly and rocky; 3rd and 4th. rates. Sub-soil, rocky and solid bed rock. Timber, scattering cedar and pinon on E. 66.70 chs. Undergrowth, short shadscale. Some good grass for grazing: Land mountainous or heavily timbered 80.00 chs.

S. 89° 59' E., bet. secs. 2 and 35.  
Over rolling mountainous land  
through scattering forest of scrub  
cedar and pinon and undergrowth

South boundary of T. 24 S., R. 17 E.

chains.

- of short shadscale.  
 1.20 Leave sandstone spur, bears NW. and SE.  
 Descend 75 ft. to  
 wash, 10 lks. wide, 3 ft. deep,  
 course N.  
 Hence over broken rocky land  
 ascending and descending across  
 numerous solid sandstone  
 outcroppings.  
 28.20 Wash, near head of box canyon,  
 25 lks. wide, 3 ft. deep, course NW.  
 40.00 Set an iron post, 3 ft. long, 1 in.  
 in dia., 24 ins. in the ground for  
 $\frac{1}{4}$  sec. cor. with brass cap marked  
 $S^{\circ} 35'$   
 $\frac{1}{4}$   
 $\underline{S^{\circ} 2'}$   
 1911  
 raise a mound of stone, 2 ft. base  
 $1\frac{1}{2}$  ft. high N. of cor.  
 80.00 Set an iron post, 3 ft. long, 3 ins.  
 in dia., 24 ins. in a mound of stone  
 and earth, 4 ft. base, 2 ft. high for  
 cor. of secs. 1, 2, 35 and 36 with  
 brass caps marked

T 24 S R 17 E	
S 35'	S 36'
S 2'	S 1'

T 25 S

1911

raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high W. of cor.

Note: On account of natural  
 obstacles, I am unable to set post in  
 the ground.

Land mountainous with a general  
 NW. drain.

Soil, sandy and rocky; 4 th. rate

South boundary of T. 24 S., R. 17 E.

chains

Sub-soil rocky.  
Timber, scattering cedar and piñon.  
Undergrowth, short shadscale.  
Some good grass for grazing.  
Land mountainous or heavily  
timbered 8000 chs.

S.  $89^{\circ} 59'$  E., bet. secs. 1 and 36.  
Over rolling mountainous land  
through scattering forest of scrub  
cedar and piñon and under-  
growth of short shadscale.  
Gradually ascend across sandstone  
bedrock.  
8.30 Sandstone ridge, 30 ft. above sec.  
cor., bears N. and S.  
Descend.  
14.00 Leave solid sandstone bears N.  
and S., enter sandy land.  
40.00 Set an iron post, 3' ft. long, 1 in.  
in dia., 24 in. in the ground for  
 $\frac{1}{4}$  sec. cor., with brass cap marked

S 36

14

S 1

1911

dig pits,  $18 \times 18 \times 12$  in., E. and W.  
of post, 3 ft. dist., raise a mound  
of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high N.  
of cor.

Gradually descend through huge  
sandstone outcroppings N. and  
S. of line.

80.00 The cor. of T's 24 and 25 S., R's. 17 and 18 E.  
Land mountainous, draining  
W. on W. 8.30 chs. and S.E. on E. 71.  
70 chs.  
Timber scattering scrub cedar and  
piñon.

South boundary of T. 24 S., R. 17 E.

chains.

Soil, sandy and rocky on rocky  
sub-soil; 4 th. rate.  
Undergrowth short shade-cals.  
Good grass for grazing.  
Land mountainous or heavily  
timbered 8000 chs.

October 27, 1911

Boundaries of T. 24 S., R. 17 E.						
Lines Designated	Bearing	Distance	Latitude		Departure	
			No.	S.	E.	W.
N. Bdy.	71° 10' N.	chs.	chs.	chs.	chs.	chs.
S <sub>6</sub> , W <sub>1/2</sub>	71° 89° 54' E	38.68	.07		38.68	
S <sub>6</sub> , E <sub>1/2</sub>	East	40.10			40.10	
S <sub>5</sub> , W <sub>1/2</sub>	71° 89° 55' E	40.02	.06		40.02	
S <sub>5</sub> , E <sub>1/2</sub>	71° 89° 55' E	39.83	.06		39.83	
S <sub>4</sub> , W <sub>1/2</sub>	71° 89° 52' E	40.12	.09		40.12	
S <sub>4</sub> , E <sub>1/2</sub>	71° 89° 33' E	40.30		.31	40.30	
S <sub>3</sub> , W <sub>1/2</sub>	71° 89° 51' E	40.00	.10		40.00	
S <sub>3</sub> , E <sub>1/2</sub>	71° 89° 53' E	40.00	.08		40.00	
S <sub>2</sub> , W <sub>1/2</sub>	71° 89° 44' E	40.65	.19		40.65	
S <sub>2</sub> , E <sub>1/2</sub>	71° 89° 10' E	40.75	.59		40.75	
S <sub>1</sub> , W <sub>1/2</sub>	71° 88° 58' E	41.06	.74		41.05	
S <sub>1</sub> , E <sub>1/2</sub>	71° 84° 56' E	38.10		3.36	37.95	
E. Bdy.	South	478.10		478.10		
S. Bdy.	71° 89° 59' W	479.74	.14			479.74
W. Bdy.	North	479.80	479.80			
Convergency						.59
Totals =			481.92	481.77	480.04	479.74
			481.77		479.74	
Errors =				.15		.30

For general description see book "I"  
of this survey.

Howard W. Miller.  
U. S. Transit man.



# FINAL OATH OF UNITED STATES SURVEYOR.

I, \_\_\_\_\_, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for \_\_\_\_\_ bearing date of the \_\_\_\_\_ day of \_\_\_\_\_, 191\_\_\_\_\_, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of \_\_\_\_\_

For final oath of Transitman see book "I" T.24 S., R.17 E.

of the \_\_\_\_\_  
Meridian, in the State of \_\_\_\_\_, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for \_\_\_\_\_ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor

Subscribed by said \_\_\_\_\_, and sworn to before me  
this \_\_\_\_\_ day of \_\_\_\_\_, 191\_\_\_\_\_ }



## APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 14, 1914.

The foregoing field notes of the survey of the East and South Boundaries and retracement and resurvey of the North Boundary of Township No. 24 South, Range No. 17 East of the Salt Lake Base and Meridian, Utah.

executed by \_\_\_\_\_ Howard W. Miller

under his special instructions dated \_\_\_\_\_ March 27, 191\_\_\_\_\_, having been critically examined, and the necessary corrections and explanations made, the said field notes and the surveys they describe, are hereby approved.

A large, cursive signature of Thomas B. Miller.

U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in \_\_\_\_\_, has been correctly copied from the original notes on file in this office.

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**Page**

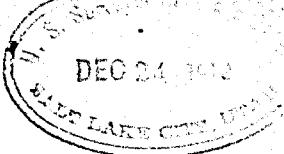
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Ex.MFY.

4-679

DEC 24 1912



BOOK A-392

Book "I"

*MSB*

# FIELD NOTES

OF THE SURVEY OF THE

S U B D I V I S I O N

AND

MEANDERS OF GREEN RIVER

TOWNSHIP 24 SOUTH, RANGE 17 EAST

Of the SALT LAKE BASE AND Meridian,

In the State of U T A H

EXECUTED BY

HOWARD W. MILLER

Transitman

In the capacity of U. S. Surveyor, under instructions dated March 27, 1911,  
issued by the United States Surveyor General to govern surveys included in  
Group No. 11, which were approved by the Commissioner of the General Land  
Office, April 20, 1911, pursuant to authority contained in the Act of  
Congress dated , 1911.

Survey commenced October 27, 1911

Survey completed June 27, 1912.

Subs 57-64-94

Clearings 1-22

Meanders 9-17-08

e-121

BOOK A-392

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Township 24 South Range 17 East

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Mesanders of Green River pages 93 to 100.

6-161

Subdivision of T. 24 S., R. 17 E.

chains.

Survey commenced October 27, 1911,  
and executed with a W. & L. E. Gurley  
solar compass No. 1043.

For description and test of instrument  
see book "A." of this survey.

Note: I make all preparations to test  
my instrument on a Polaris meridian,  
but, the sky being overcast the entire  
night I am unable to make an  
observation on Polaris.

October 27, 1911

October 28: At the cor. of secs 1, 2, 35  
and 36 on the S. bdy. of the tp.

Heretofore described, I set off  $38^{\circ} 41'$   
on the lat. arc;  $12^{\circ} 56'$  S. on the  
decl. arc; and at  $7^{\text{h}} 44^{\text{m}}$  a.m. l.  
m. t., determine a meridian with  
the solar.

Hence I run

$7.0^{\circ} 0' W.$ , bet. secs. 35 and 36.

Over mountainous land, gradually  
ascending through scattering scrub  
cedar and pinon timber and  
shadscale undergrowth.

11.30 Spur, 30 ft. above sec. cor., projects  
west.

Descend 50 ft. to

11.20 Wash in hollow, 15 lks. wide,  
drains W.

Ascend 30 ft. to

19.75 Low ridge, bears E. + W.  
Gradually descend over land  
sloping NW.

40.00 Set an iron post, 3 ft. long, 1 in.  
in dia., 26 ins. in the ground for  
 $\frac{1}{4}$  sec. cor., marked on brass cap

S.35 | S.36

$\frac{1}{4}$

1911

Subdivision of T. 24 S., R. 17 E.

chains.	
	raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor.
48.50	Enter solid sandstone bed rock, bars E. and W.
	Descend abruptly 40 ft. to wash, 20 lks. wide, 2 ft. deep, drains W.
	Ascend 50 ft. to
59.60	Sandstone spur, projects W. Descend 50 ft. to
68.00	Leave sand stone bed rock, enter sandy land and greasewood undergrowth, bars E. & W.
71.15	wash, 15 lks. wide, 3 ft. deep, drains N. 65° W. Gradually ascend.
80.00	Set an iron post, 3 ft. long, 2 in. in dia., 24 in. in the ground for cor. of secs. 25, 26, 35 and 36 with brass cap marked.

T 24 S	R 17 E
S 26	S 25
S 35	S 36

19/11

dig pits, 18 x 18 x 12 in., in each sec.  
5 1/2 ft. dist., raise a mound of  
earth, 4 ft. base, 2 ft. high, W.  
of cor.

Land, mountainous draining W.  
Soil, rocky and sandy; 4 th. rate.  
Sub soil, bed rock, within 4 ft. of  
surface.

Timber, scattering scrub cedar  
and pinon.

Undergrowth, shadscale and  
greasewood.

Some good grass for grazing.  
Land mountainous or heavily

Subdivision of T. 24 S., R. 17 E.

chain

timbered 80.00 chs.

S.  $89^{\circ} 59'$  E., on random line bet. secs. 25 and 36.

40.00 Set temporary  $\frac{1}{4}$  sec. cor.

80.06 Intersect E. bdy. of the tp. at the cor. of secs. 25, 30, 31 and 36 heretofore described.

Hence, I run

N.  $89^{\circ} 59'$  W., on true line bet. secs. 25 and 36.

Over mountainous land, through scattering forest of scrub cedar and pinon and undergrowth of shadscale and greasewood.

Ascend over bed rock, 35 ft. to

4.00 Sandstone ridge, bears N.E. & S.W.

Descend 40 ft. to

14.00 Wash, 10 lks. wide, 4 ft. deep, drains N.

Leave sandstone bed rock, bears N. & S.

Gradually ascend.

25.00 Ridge, 50 ft. high, bears N. & S.

Descend.

32.05 Wash, 15 lks. wide, 2 ft. deep, drains NW.

Hence over land facing N.

40.03 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for  $\frac{1}{4}$  sec. cor., with brass cap marked

S 25

$\frac{1}{4}$

S 36

19 11

Dig pits,  $18 \times 18 \times 12$  ins., E. & W. of post, 3 ft. dist., raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$

Subdivision of T. 24 S., R. 17 E.

Chain

- ft. High N. of cor.
- 45.05 Wash, 20 lks. wide, 2 ft. deep,  
drains N. ascend 30 ft. to  
60.85 Sandstone spur, projects N.  
gradually descend.
- 80.06 The cor. of secs. 25, 26, 35 and 36.  
Land, mountainous draining  
NW.  
Soil, sandy and rocky; 4th. rate.  
Sub-soil, bed rock, within 3 ft.  
of surface.  
Timber, scattering scrub cedar  
and pinon.  
Undergrowth, shadscale and  
greasewood.  
Some good grass for grazing on  
W. 4000 chs.  
Land mountainous or heavily  
timbered 80.06 chs.

- N. 0° 01' W., bet. secs. 25 and 26.  
Over mountainous land, through  
scattering forest of scrub cedar  
and pinon and undergrowth  
of shadscale.
- 2.00 Wash, 20 lks. wide, 2 ft. deep,  
drains SW.  
Ascend 30 ft. to
- 8.90 Solid sandstone ridge, bears NW.  
and SE.  
Descend over broken land along  
west side of hollow across  
numerous sandstone outcroppings.
- 30.80 Hollow, 50 ft. deep, drains E.  
ascend.
- 40.00 On solid sandstone bed rock. Mark  
+ for exact cor. point, set an iron  
post, 3 ft. long, 1 in. in dia., 24 ms.  
in a mound of stone, 4 ft. base, 2 ft.

Subdivision of T. 24 S., R. 17 E.

Chain no.

High, for  $\frac{1}{4}$  sec. cor., with brass cap marked.

S 26 | S 25  
1/4

1911

raise a mound of stone, 2 ft. base,  
 $\frac{1}{4}$  ft. high W. of cor.  
note: On account of natural obstacles I am unable to set post ground.  
42.00 a sandstone pinnacle 30 ft. high,  
bears W. 2 chs.

Hence over land facing E.  
54.20 Top of perpendicular sandstone  
ledge 30 ft. high, bears NW. & SE.  
Descend abruptly into canyon.

58.40 Wash in canyon, 20 lks. wide,  
75 ft. below top, course N. 5° W.  
Hence along E. side of wash.

70.00 Canyon wash turns N. 60° W.  
Hence along west end of high  
sandstone pinnacles.

71.00 On west slope of pinnacle 80 ft. high  
descend 30 ft. to

79.60 Wash, 30 lks. wide, 6 ft. deep,  
drains W.  
Ascend.

80.00 On west slope of pinnacle, bench.  
Impossible to set cor. at this point.  
Mark + for exact cor. point.  
Land, mountainous, draining NW.  
Soil, rocky; 4 th. rate.  
Sub-soil, bed rock, within 2 ft. of  
surface

Timber, scattering scrub cedar and  
piñon.

Undergrowth, shadscale.

Land mountainous or heavily  
timbered 80.00 chs.

October 28: At this point I set off  
12° 55' S. on the decl. arc; and at  
11<sup>h</sup> 44<sup>m</sup> a.m. l.m.t., observe the

Subdivision of T. 24 S., R. 17 E.

chains

run on the meridian; the resulting lat is  $38^{\circ} 42' 4''$ .

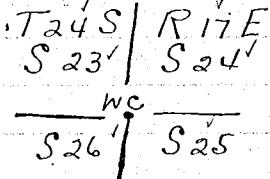
- S.  $89^{\circ} 59'$  E., on random line bet. secs. 24 and 25.
- 40.00 Set temporary  $\frac{1}{4}$  sec. cor.
- 80.14 Intersect E bdg. of the tp., 5 lks. N. of the cor. of secs. 19, 24, 25 and 30. Before or after described. Hence I run
- N.  $89^{\circ} 57'$  W., on true line bet. secs. 24 and 25.
- Over rolling mountainous land through short undergrowth of shadscale.
- 26.40 Wash, 20 lks. wide, 3 ft. deep, drains NW.
- 30.90 Wash, 20 lks. wide, 3 ft. deep, drains NW.
- 40.07 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for  $\frac{1}{4}$  sec. cor., with brass cap marked
- $S^{24}$   
 $\frac{1}{4} 44$
- $S^{25}$
- 1911
- dig pits,  $18 \times 18 \times 12$  ins., E. and W. of post, 3 ft. dist., raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high N. of cor.
- 59.15 Wash, 20 lks. wide, 10 ft. deep, drains N.
- 70.10 Same wash, drains S.  $60^{\circ}$  W.
- 79.60 Top of pinnacle and west end of bench, bears N.E. and S.E. Descend abruptly.
- 80.14 The true cor. point of secs. 23, 24, 25 and 26.
- Land mountainous draining NW.

Subdivision of T. 24 S., R. 17 E.

chains

Soil, gravelly and rocky; 3rd. and 4th. rates.  
 Sub-soil, rocky.  
 No timber.  
 Undergrowth, short shadscale.  
 Some good grass for grazing.  
 Land mountainous or covered with dense undergrowth 80.14  
 chs.

N.  $0^{\circ}0'W$ , bet. secs. 23 and 24.  
 Over mountainous land.  
 Descend over west face of pinnacle  
 0.60 Base of pinnacle, bears SW. & E.  
 Set an iron post, 3 ft. long, 2 in.  
 in dia; 24 in. in a mound of  
 stone and earth, 4 ft. base, 2 ft.  
 high for witness cor. to secs.  
 23, 24, 25 and 26, with brass  
 cap marked



1911

Raise a mound of stone, 2 ft.  
 base,  $1\frac{1}{2}$  ft. high W. of cor.  
 Note: On account of natural  
 obstacles, I am unable to set post  
 in the ground.

Ascend 40 ft. to

4.00 Sandstone ridge, bears E. & W.  
 Descend 50 ft. to

17.80 Wash in hollow, 20 ft. wide,  
 drains W.

Gradually ascend.

39.00 Ridge, 75 ft. above hollow, bears  
 E. and W.  
 Descend

Subdivision of T. 24 S., R. 17 E.

chains.

40.00 Set an iron post, 3 ft. long, 1 in.  
in dia., 24 mis. in the ground for  
 $\frac{1}{16}$  sec. cor., with brass cap marked

$\frac{1}{16}$

S 23 | S 24

1911

raise a mound of stone, 2 ft. base,  
 $\frac{1}{12}$  ft. high W. of cor.

Enter solid sandstone bed rock,  
bears E. and W.

42.00 Enter hollow, 40 ft. deep, drains N.

53.00 Hollow turns NW.

Ascend 50 ft. to

58.00 Sandstone spur, projects W.

Descend 50 ft. to

59.90 Hollow, drains S.  $80^{\circ}$  W.

Ascend 60 ft. to

63.50 Top of sandstone ledge and spur,  
projects SE.

Gradually descend

69.00 Head of hollow, drains SE.

Ascend 25 ft. to

75.00 Ridge, bears E. and W.

Descend 30 ft. to

80.00 Set an iron post, 3 ft. long, 2 mis. in  
dia., 24 mis. in a mound of earth  
and stone, 4 ft. base, 2 ft. high, for  
cor. of secs. 13, 14, 23 and 24, with  
brass cap marked

T 24 S | R 17 E.

S 14 | S 13

S 23 | S 24

1911

raise a mound of stone, 2 ft. base,  
 $\frac{1}{12}$  ft. high W. of cor.

Note: On account of natural obstacles  
I am unable to set post in the  
ground.

Land mountainous draining NW.

# Subdivision of T. 24 S., R. 17 E.

chains.

Soil, rocky; 4th rate.

Sub-soil, rocky.

No timber.

Undergrowth, some short  
shadscale.

Mountainous land 8000 chs.

October 28, 1911

Completion of the survey of this tp.  
commenced June 10, 1912 and  
executed with a W. & L. E. Gurley  
solar compass No. 1043. The horizontal  
limb is provided with one vernier  
which reads to single minutes of  
arc; which is also the least count  
of the verniers of the latitude and  
declination arcs.

The instrument was examined,  
tested on the true meridian at Salt  
Lake City, found correct, and was  
approved by the U. S. Surveyor  
General for Utah, June 4, 1912.

I examine the adjustments of the  
compass, and correct the level and  
collimation errors; then, to test  
the solar apparatus, by comparing  
its indications, resulting from  
solar observations made during  
a.m. and p.m. hours, with a true  
meridian determined by observations  
on Polaris, I proceed as follows:

At my camp, which is situated near  
the  $\frac{1}{4}$  sec. cor. bet. secs. 10 and 15,  
latitude  $38^{\circ} 44' N.$ , longitude  $110^{\circ} 10'$   
 $08'' W.$ , I set off  $38^{\circ} 44' N.$  on the lat.  
arc;  $23^{\circ} 04' N.$  on the decl. arc;  
and at  $4^{\text{h}} 29^{\text{m}}$  p.m. l.m.t., determine  
with the solar a meridian, and  
mark a point thereof, on a stone

Subdivision of T. 24 S., R. 17 E.

chain.

firmly set in the ground, 5 chs. N. of my station.

June 10, 1911

June 11: At 2<sup>h</sup>. 14<sup>m</sup>. a.m. l.m.t., by my watch, I observe Polaris at eastern elongation, in accordance with the Manual of Instructions, and mark a point in the line thus determined, on a peg driven firmly in the ground, 5 chs. N. of my station.

At 6 a.m., I lay off the azimuth of Polaris  $1^{\circ} 31'$  to the west and note that this true meridian coincides with the solar meridian of June 10.

At 6<sup>h</sup>. 59<sup>m</sup>. a.m. l.m.t., I set off  $38^{\circ} 44'$  N. on the lat. arc;  $23^{\circ} 07'$  N., on the decl. arc; and determine a meridian with the solar. This meridian also agrees with the Polaris meridian and the solar meridian of June 10: I therefore conclude that the instrument is in perfect adjustment.

The magnetic bearing of the true meridian at 7<sup>h</sup>. 15<sup>m</sup>. a.m. is  $71.15^{\circ} 15' W.$ , the angle thus determined gives the magnetic decl.  $15^{\circ} 15' E.$

June 11: At the cor. of secs. 13, 14, 23 and 24 I set off  $23^{\circ} 07'$  N., on the decl. arc; and at 11<sup>h</sup>. 59<sup>m</sup>. a.m. l.m.t., observe the sun on the meridian; the resulting lat. is  $38^{\circ} 43'$ .

From this sec. cor. I run.

S.  $89^{\circ} 57' E.$ , on random line bet. secs.

Subdivision of T. 24 S., R. 17 E.

chains

- 13 and 24.
- 40.00 Set temporary  $\frac{1}{4}$  sec. cor.
- 80.20 Int. erect E. bdy. of the tp. 21 lks. S. of the cor. of secs. 13, 18, 19 and 24 heretofore described  
Hence I run  
S.  $89^{\circ} 54'$  W., on tree line bet. secs.  
13 and 24.
- Over mountainous land, through scattering forest of scrub cedar and pinon and undergrowth of grease-wood.
- Ascend over solid sandstone pinnacles.
- 18.20 Sandstone ridge, 50 ft. high, bears N. and S. 6 chs.  
Descend.
- 36.20 Top of perpendicular sandstone ledge 100 ft. high and east side of box canyon, bears N. + S.  
Descend abruptly.
- 38.00 Wash in canyon, 25 lks. wide,  
course N.  $20^{\circ}$  W.  
Ascend abruptly over ledges 100 ft. to.
- 39.80 Top of west side canyon, bears NW. and S.  
continue to ascend
- 40.10 Point for  $\frac{1}{4}$  sec. cor. falls on steep east slope of solid sandstone bed rock where cor cannot be set.  
Mark + for exact cor. point.
- 40.30 Set an iron post, 3 ft. long, 1 in. dia., 24 ins. in a mound of stone and earth 4 ft. base, 2 ft. high, for witness cor. to the  $\frac{1}{4}$  sec. cor., with brass cap marked

T 24 S R 17 E.

S 13 w $\frac{1}{4}$ .

S 24

1912

Subdivision of T. 24 S., R. 17 E.

chains	
	raise a mound of stone, 2 ft. base, 1½ ft. high N. of cor.
	Note: On account of natural obstacles, I am unable to set post in the ground.
44.00	Spur, 125 ft. above canyon, projects N. Descend abruptly over ledges.
48.00	Hollow near head, 100 ft. deep. drains N. Ascend abruptly.
50.00	Top of steep ascent, bears N. & S. Thence over broken land sloping N.
80.20	The cor. of secs. 13, 14, 23 and 24. Land, mountainous draining N. Soil, rocky; 4 th. rate. Sub-soil, bed rock within 2 ft. of surface. Timber, some scattering scrub cedar and pinon. Undergrowth, greasewood. Land mountainous or heavily timbered 80.20 cha.
	N. 0° 0' W. bet. secs. 13 and 14 Over mountainous land, through scattering forest of scrub cedar and pinon. Descend over sandstone bed rock near east side of Ten mile Canyon.
27.60	Top of perpendicular sandstone ledge 75 ft. high and wall of Ten mile canyon, bears E. 5 chs. thence N. and W. 3 chs. thence S. Descend abruptly 125 ft. to
32.30	Hollow and wash, 25 lks. wide, drains NW. Ascend.

Subdivision of T. 24 S., R. 17 E.

chains.

- 39.85 Point for  $\frac{1}{4}$  sec. cor. will fall on steep slope of solid sandstone bed rock where cor. cannot be set, therefore at this point, Set an iron post,  $\frac{3}{4}$  ft. long, 1 in. in dia.,  $\frac{2}{4}$  ms. in a mound of stone and earth, 4 ft. base, 2 ft. high for witness cor. to the  $\frac{1}{4}$  sec. cor. with brass cap marked

T 24 S. R 17 E

WC  $\frac{1}{4}$   
S 14 | S 13

19.12

raise a mound of stone, 2 ft. base,  $\frac{1}{4}$  ft. high W. of cor.

Note: On account of natural obstacles, I am unable to set post in the ground.

Ascend abruptly from canyon over ledges.

- 40.00 Point for  $\frac{1}{4}$  sec. cor. on ledge. Cor. point cannot be reached.

- 42.40 Spur, 140 ft. above hollow, projects NW.

- 44.70 Top perpendicular sandstone ledge, 50 ft. high and south side of Ten mile canyon, bears NW. and E. Ascend abruptly 150 ft. to

- 52.00 Wash in Ten mile canyon, 1 ch. wide, some alkali water, course SW. Gradually ascend.

- 57.70 Base of perpendicular sandstone ledge, 70 ft. high, bears NE. & NW. Leave canyon, ascend abruptly.

- 61.00 Top of ledge, bears NE. and NW. Hence over solid sandstone bedrock.

- 80.00 Point for cor. of secs. 11, 12, 13 and 14

Subdivision of T. 24 S., R. 17 E.

chain.

falls on solid sandstone bed rock.  
Mark + for exact corner point & set an iron post, 3 ft. long, 2 in. in dia., 24 in. in a mound of stone and earth, 4 ft. base, 2 ft. high, for cor. of secs. 11, 12, 13 and 14 with brass cap marked.

T 24 S	R 17 E
S 11	S 12
S 14	S 13

1912

raise a mound of stone, 2 ft. base,  $1\frac{1}{4}$  ft. high W. of cor.

Note: On account of natural obstacles I am unable to set post in the ground.

Land, mountainous, draining NW. on S. 52 chs. and S. on N. 28 chs.

Soil, rocky; 4 th. rate.

Sub-soil, bed rock.

Timber, a few cedar and pinon.

No undergrowth.

Land, mountainous or heavily timbered, 80.00 chs.

June 11, 1912

June 12: At 7<sup>h</sup> 00<sup>m</sup>. a.m. l.m.t., I set off  $38^{\circ} 44'$  on the lat. arc;  $23^{\circ} 11'$  N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 11, 12, 13 & 14.

Hence I run

N.  $89^{\circ} 54'$  E., on random line bet. secs. 12 & 13.

1/0.00 Set temporary 1/4 sec. cor.

\$0.26 Intersect E. bdy. of the sp. 16 lks.

N. of the cor. of secs. 7, 12, 13 and 18

Subdivision of T. 24 S., R. 17 E.

chains

heretofore described

Thence I run

N.  $89^{\circ} 59'$  W., on tree line bet. sec. 12 and 13.

Over mountainous land, through short undergrowth of shadscale. Ascend abruptly from canyon.

1.35 Top of sandstone ledge 20 ft. high, and west side of canyon, bears N. and S.

Gradually ascend.

10.00 Spur, projects N.

Gradually descend.

18.20 Top of perpendicular sandstone ledge, 35 ft. high, and east side of Ten mile canyon, bears NE. and SW.

Descend.

19.00 Enter bottom land in Ten mile canyon.

23.25 Wash in canyon, 1 ch. wide, 100 ft. below spur, <sup>some alkali water</sup>, drains SW.

30.00 Leave canyon, bears NE. & SW. Ascend abruptly over ledges.

33.00 Sandstone spur, 100 ft. above canyon, projects S.

Gradually descend.

38.00 Sandstone ledge, 30 ft. high, bears N. & S.

Descend.

39.00 Enter sandy hollow, bears N. & S. Thence across hollow.

40.13 Set an iron post, 3' ft. long, <sup>1</sup>/<sub>4</sub> in. in dia., 2<sup>1</sup>/<sub>2</sub> ins. in the ground for  $\frac{1}{4}$  sec. cor., with brass cap marked

$\frac{1}{4}$

S 12

S 13

1912

Subdivision of T. 24 S., R. 17 E.

chains.	dig pits, 18 x 18 x 12 ins., E. and W. of post 3 ft. dist, raise a mound of earth, $3\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
40.50	Leave hollow, bears N. & S. Ascend abruptly over solid sandstone bed rock.
51.10	Sandstone ridge, 75 ft. above 1/4 sec. cor., bears N. & S. Descend 75 ft. to
64.00	Hollow, drains SW. Ascend abruptly.
66.50	Sandstone spur, 50 ft. high, projects S. Descend 60 ft. to
68.70	Hollow, drains S. Ascend 100 ft. to
79.00	On south side of sand stone pinnacle. Descend 15 ft. to
80.26	The cor. of secs. 11, 12, 13 and 14. Land, mountainous, draining N. to Ten mile canyon on E. 23.25 chs. and S. to same canyon on W. 57.01 chs. Soil, rocky and solid bed rock; 4 th. rate. Sub-soil, rocky. No timber. Undergrowth, some short shadscale. Land mountainous or covered with dense undergrowth 80.26 chs.

N. 0° 0' W., bet. secs. 11 and 12.  
Over mountainous land across  
solid sandstone bed rock.  
Ascend abruptly 50 ft. to  
Top of sandstone pinnacle  
thence over broken land.

Subdivision of T. 24 S., R. 17 E.

chain's	
20.50	Leave solid sandstone bed rock, enter sandy brush, bears E. & W. Hence over rolling land, through short undergrowth of greasewood.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked.
	$\frac{1}{4}$ S 11   S 12 1912
	dig pits $18 \times 18 \times 12$ ins., N. & S. of post, 3 ft. dist., raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 1, 2, 11 and 12, with brass cap marked
	T 24 S   R 17 E S 2   S 1 — S 11   S 12 1912
	dig pits, $18 \times 18 \times 12$ ins. in each sec. $5\frac{1}{2}$ ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high W. of cor.
	Land. rolling and mountainous draining S.
S. 20.50 chs.	mountainous land. soil, solid sand stone bed rock.
N. 59.50 chs.	rolling brush land soil, sandy; 2nd rate on rich sandy loam sub-soil, 3 ft. deep.
	Undergrowth, greasewood about 2 ft. high. good grass for grazing.
	Mountainous land 20.50 chs.
	June 12: At this sec. cor. I set off $23^{\circ} 11'$ N. on the decl. arc; and

Subdivision of T. 24 S. R. 17 E.

chains.

at 12<sup>45'</sup> 00" m. l. m. t., observe the sun on the meridian; the resulting lat. is 38° 45'

S. 89° 59' E., on random line bet. secs. 1 and 12.

40.00 Set temporary  $\frac{1}{4}$  sec. cor.  
80.24 Intersect E. bdy. of the tp. at the cor. of secs. 1, 6, 7 and 12 heretofore described.

Hence I run

N. 89° 59' W., on tree line bet. secs. 1 and 12.

Over rolling land through short undergrowth of greasewood.

40.12 Set an iron post, 3 ft. long, 1 in. in dia., 2½ ins. in the ground for  $\frac{1}{4}$  sec. cor., with brass cap marked  $\frac{1}{4}$

S1

S12

1912

raise a mound of stone, 2 ft. base,  $\frac{1}{4}$  ft. high N. of cor.

The cor. of secs. 1, 2, 11 and 12.

Land, rolling with a general south drain

Soil, sandy; 2nd. rate.

Sub-soil, rich sandy loam.

Undergrowth, short greasewood.

Good grass for grazing.

No timber.

Having retraced the north boundary of this tp., and knowing that a closing corner will be necessary between secs. 1 & 2

I run

N. 0° 01' W., on tree line bet. secs. 1 and

Subdivision of T. 24 S., R. 17 E.

Chains.

2. Gradually ascend over gently rolling sandy land, through short undergrowth of greasewood.
- 22.50 Wagon road from Green river, Utah to Moab, Utah, bears N.  $80^{\circ}$  E. and S.  $80^{\circ}$  W.
- Leave sandy land and greasewood undergrowth.
- 40.00 Set an iron post, 3 ft. long, 1 m. in dia., 2½ ins. in a mound of stone and earth, 4 ft. base, 2 ft. high for  $\frac{1}{4}$  sec. cor., with brass cap marked
- |               |  |     |
|---------------|--|-----|
| $\frac{1}{4}$ |  |     |
| S 2           |  | S 1 |
- 1912.
- Raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- Note: On account of natural obstacles I am unable to set post in the ground.
- 43.50 Enter solid sandstone bed rock, bears E. and W.
- Begin to descend.
- 52.50 Hollow, 40 ft. deep, drains NE.
- Ascend abruptly 70 ft. to:
- 60.30 Sandstone pinnacle on ridge, bears NE. & SW.
- Descend 75 ft. to
- 74.00 Hollow, drains S.  $80^{\circ}$  W.
- Ascend 50 ft. to
- 80.78 Intersect N. bdy. of the tp. 1.22 chs. S.  $89^{\circ} 10'$  W. of the cor. of secs. 1, 2, 35 and 36 heretofore described.
- At intersection, Set an iron post, 3 ft. long, 2 ins. in dia., 2½ ins. in a mound of stone and earth, 4 ft.

Subdivision of T. 24 S., R. 17 E.

chains

base, 2 ft. high for closing cor. of secs. 1 and 2, with brass cap marked.

T 23 S R 17 E  
 S 35 cc | S 36  
 S 2' | S 1'  
 T 24 S  
 1912.

raise a mound of stone, 2 ft. base  
 1 1/2 ft. high S. of cor.

I destroy all marks on old cor.  
 pertaining to secs. 1 and 2.

Note: On account of natural  
 obstacles, I am unable to set  
 post in the ground.

Land, rolling and mountainous.  
 S. 43.50 chs. rolling land with a  
 general S. drain. soil, sandy and  
 gravelly; 2nd. rate. sub-soil, sandy  
 loam and rocky; Undergrowth  
 short greasewood on S. 22.50 chs. Good  
 grass on S. 22.50 chs.

N. 37.28 chs. mountainous land.  
 draining N. and W. Soil, rocky on  
 rocky sub-soil; 4th. rate.

No undergrowth

No timber.

Mountainous land 37.28 chs.

June 12, 1912

June 13: At 9<sup>th</sup> 30<sup>m</sup> a.m. I. m. t., I  
 set off  $38^{\circ} 41'$  on the lat. arc;  $23^{\circ}$   
 $14' N.$ , on the decl. arc; and  
 determine a meridian with the  
 solar at the cor. of secs. 2, 3, 34  
 and 35 on the S. bdy. of the tp.  
 heretofore described.

hence I run

N.  $0^{\circ} 0' W.$ , bet. secs. 34 and 35

Subdivision of T. 24 S., R. 17 E.

chains

Over mountainous land, through short undergrowth of shadscale. Descend from ridge over land facing nearly north.

- 14.70 Top of perpendicular sandstone ledge 35 ft. high and south side of box canyon, bears NW. and SE.  
Descend abruptly 100 ft. to  
wash, in bottom of canyon, 50 ft. wide, drains NW.  
Ascend abruptly over ledges 125 ft. to  
21.00 Top of north side of canyon, bears NW. and SE.  
Note: Canyon forms a box about 10 chs. SE.  
Hence over broken land.  
40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for  $\frac{1}{4}$  sec. cor., with brass cap marked  

$$\begin{array}{c} \frac{1}{4}, \\ \text{S} 34 \quad \text{S} 35 \end{array}$$

1912.

-dig pits,  $18 \times 18 \times 12$  ins. N. & S. of post, 3 ft. dist, raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high W. of cor.

- 53.00 Base of solid sandstone ridge, bears E. and W.  
Ascend abruptly 150 ft. to  
59.00 Top of ridge bears E. and W. 5 chs.  
Descend 125 ft. to  
66.00 Base of ridge, bears E. & W.  
Gradually descend over rocky land  
80.00 Set an iron post, 3' ft. long, 1 in. in dia., 24 ins. in the ground, for cor. of secs. 26, 27, 34 and 35 with brass cap marked.

Subdivision of T. 24 S., R. 17 E.

Chains.

T 24 S.	R. 17 E.
S 27	S 26
S 34	S 35

1912.

raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high. W. of cor.  
 Land, mountainous draining W.  
 Soil, rocky and sandy; 4th. and 3rd.  
 rates  
 Sub-soil, rocky.  
 No timber.  
 Undergrowth, short shadscale.  
 Mountainous land 80.00 chs.  
 June 13: At this sec. cor., I set off  
 $23^{\circ}14'$  N., on the decl. arc; and  
 at  $12^{\text{h}} 00^{\text{m}}$ . m. l. m. t., observe the  
 sun on the meridian; the resulting  
 lat is  $38^{\circ}42'$ .

S.  $89^{\circ}59'$  E., on random line bet.  
 secs. 26 and 35  
 40.00 Set temporary  $\frac{1}{4}$  sec. cor.  
 79.90 Intersect N. & S. line 3 lks. S. of the  
 cor. of secs. 25, 26, 35 and 36.  
 Hence I run  
 West, on true line bet. secs. 26 and  
 35.  
 Over rolling mountainous land  
 deep sand and short greasewood  
 Undergrowth wash - 20 lks. wide, 5 ft. deep, drains SW.  
 22.90 Wash, 30 lks. wide, 15 ft. deep,  
 drains N.  $60^{\circ}$  W.  
 39.95 Set an iron post, 3 ft. long, 1 in.  
 in dia., 24 in. in the ground for  
 $\frac{1}{4}$  sec. cor., with brass cap marked

$\frac{1}{4}$ ,

S 26

S 35

1912

Subdivision of T. 24 S., R. 17 E.

chains	dig pits, $18 \times 18 \times 12$ ins., E. and W. of post 3 ft. dist, raise a mound of earth $3\frac{1}{4}$ ft. base, $1\frac{1}{4}$ ft. high N. of cor.
79.90	The cor. of secs. 26, 27, 34 and 35. Land, mountainous, draining NW. Soil, sandy and rocky; 3rd. and 4th rates. Sub-soil, sandy and rocky. Timber, a few scattering cedar and pinon. Undergrowth, short greasewood. Some good grass for grazing. Mountainous land 79.90 chs.
	June 13, 1912
	June 14: At $7^{\text{th}}$ 00 <sup>m</sup> a.m. I. m. t., I set off $38^{\circ}42'$ on the lat. arc; $23^{\circ}18'$ N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 26, 27, 34 and 35. Hence I run $71.0^{\circ}01'W.$ , bet. secs. 26 and 27. Over broken mountainous land draining NW., through scattering forest of cedar and pinon and undergrowth of greasewood. Gradually descend 30 ft. to wash, 10 lks. wide, 2 ft. deep, drains NW.
6.80	Enter solid sandstone bed rock bears $71.20^{\circ}W.$ , and SE.
8.00	13.00 Wash, 1 ch. wide, 5 ft. deep, drains NW.
	ascend 40 ft. to low ridge, bears NW. and SE.
	Leave solid sandstone bedrock, enter sandy land.
	Gradually descend, set an iron post, 3 ft. long, 1 in. in

Subdivision of T. 24 S., R. 17 E.

chains

dia., 2*i*.<sup>1</sup><sub>2</sub> in. in the ground for  $\frac{1}{4}$   
sec. cor., with brass cap marked

$\frac{1}{4}$		
S 27	S 26	

1912

dig pits, 18 x 18 x 12 in., N. & S. of  
post 3 ft. dist., raise a mound  
of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high  
W. of cor.

- 51.00 Wash, 1 ch. wide, 5 ft. deep,  
drains W.
- 51.50 Base of solid sandstone ridge,  
bears E. + W.  
Ascend 100 ft. to
- 65.00 Top of ridge, bears N. 60° W. and  
S. 60° E.  
Descend abruptly over ledges.
- 76.60 Base of ridge, bears E. and W.  
Gradually descend over solid  
sandstone bedrock.
- 80.00 Set an iron post, 3 ft. long, 2 in. in  
dia, 2*i*.<sup>1</sup><sub>2</sub> in. in a mound of stone,  
4 ft. base, 2 ft. high for cor. of  
secs. 22, 23, 26 and 27, with brass  
cap marked

$T 24 S$	$R 17 E$	
S 22	S 23	
S 27	S 26	

1912

raise a mound of stone, 2 ft. base  
 $1\frac{1}{2}$  ft. high W. of cor.

Note: On account of natural  
obstacles, I am unable to set post  
in the ground.

Land, mountainous draining W.  
Soil, sandy and rocky on rocky  
sub-soil; 4 th. rate

Subdivision of T. 24 S., R. 17 E.

chains	<p>Timber, a few scattering cedar and pinon. Mudcrust growth; some greasewood. Some good grass for grazing. Mountainous or timbered land. 80.00 chs.</p>
	<p>East, on random line bet. secs. 23 and 26.</p>
160.00	Set temporary N. sec. cor.
79.86	Intersect N. & S. line 5 lks. N. of the true corner point of secs. 23, 24, 25 and 26.
	Hence I run
	N. $89^{\circ} 58' W.$ , on tree line bet. secs. 23 and 26.
	Over mountainous land.
	Descend abruptly over west face of sandstone pinnacle.
2.00	Base of pinnacle + hollow, 50 ft. deep, drains SW.
	Ascend abruptly over solid sandstone.
12.00	Spur, 85 ft. above hollow, projects SE.
	Descend abruptly 100 ft. over ledges into Trail canyon.
22.50	Wash in Trail canyon, 1 ch. wide, drains $77.65^{\circ} W.$ .
	Ascend abruptly over ledges.
27.00	Top of west side of canyon, bears $77.65^{\circ} W.$ + $S. 80^{\circ} E.$
	Continue to ascend.
36.00	Top of sandstone ridge, 125 ft. above canyon, bears NW. + SE.
	Descend.
39.93	Set an iron post, 3 ft. long, 1 in. in dia., 24 in. in a mound of stone and earth, 4 ft. base, 2 ft.

Subdivision of T. 24 S., R. 17 E.

chains.

high for  $\frac{1}{4}$  sec. cor., with brass cap marked

$\frac{1}{4}$

S 23'

S 26'

1912.

raise a mound of stone, 2 ft. base,  
 $\frac{1}{4}$  ft. high N. of cor.

Note: On account of natural  
 obstacles, I am unable to set post  
 in the ground.

40.50 Top of perpendicular sandstone  
 ledge, 30 ft. high, bears N. + S.  
 Descend.

41.00 Wash, 20 lks. wide, coarse  
 NW.

Hence over solid sandstone  
 bed rock.

48.50 Top of sandstone pinnacle 30 ft.  
 high, on low ridge, bears NW.  
 and SE.

60.00 Wash, 50 lks. wide, 3 ft. deep,  
 drains NW.

79.86 The cor. of secs. 22, 23, 26 and 27.  
 Land, mountainous, draining NW.  
 Soil, sandstone bed rock: 4th. rate  
 No timber.

No undergrowth.

mountainous land 79.86.

June 14: At this sec. cor. I set  
 off  $23^{\circ} 17' N.$  on the decl. arc; and  
 at  $12^{\text{h}}\ 00^{\text{m}}\ \text{m. l.m.t.}$ , observe  
 the sun on the meridian; the  
 resulting lat. is  $38^{\circ} 42' +$ .

$7.0^{\circ} 01' W.$ , bet. secs. 22 and 23.

Over mountainous land.

Descend over solid sandstone  
 bed rock.

Subdivision of T. 24 S., R. 17 E.

Chains	
10.00	Leave solid sandstone bed rock, enter sandy land and some scattering cedar timber.
34.00	Head of rocky hollow, drains W. Ascend 70 ft. to
39.00	Top of brush, bears NW. and SE. Gradually descend.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 2 1/4 ins. in a mound of stone, 4 ft. base, 2 ft. high, for 1/4 sec. cor., with brass cap marked
	$\frac{1}{4}$ S22   S23
	1912.
	raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor.
	Note: On account of natural obstacles, I am unable to set post in the ground.
47.00	Sandstone pinnacle, 50 ft. high, bears E. & chs.
50.00	Leave brush, bears NW. and SE. Descend 75 ft. to
65.00	South side of trail canyon, bears NW. and SE. Descend abruptly over ledges.
68.50	Wash in canyon, 1 ch. wide, 100 ft. below top of canyon, drains NW.
70.00	Base of perpendicular sandstone ledge, 75 ft. high, bears NW. and SE. Ascend abruptly from canyon.
73.00	Top of sandstone ridge, 140 ft. above canyon, bears NW. and SE. Descend.
78.00	Hollow, 30 ft. deep, drains W. Ascend.
80.00	Set an iron post, 3 ft. long, 2 ins.

Subdivision of T. 24 S., R. 17 E.

chains.

in dia., 24 ins. in a mound of stone and earth, 4 ft. base, 2 ft. high for cor. of secs. 14, 15, 22 and 23 with brass cap marked.

T 24 S	R 17 E
S 15	S 14
S 22	S 23

1912.

raise a mound of stone, 2 ft. base 1 1/2 ft. high, W. of cor.

Note: On account of natural obstacles I am unable to set post in the ground.

Land, mountainous draining NW.

Soil, sandstone bed rock and sandy; 4 th. rate.

Sub-soil, rocks.

Timber, a few scattering cedar.

No undergrowth.

Land mountainous or heavily timbered 8000 chs.

S.  $89^{\circ} 58'$  E., on random line bet. secs. 14 and 23.

40.00 Set temporary 1/4 sec. cor.

79.89 Intersect N. + S. line at the cor. of secs. 13, 14, 23 and 24.

Hence I run

N.  $89^{\circ} 58'$  W. on true line bet. secs. 14 and 23.

Over mountainous land facing north to Ten mile canyon, through scattering forest of scrub cedar.

30.00 Leave scattering cedar, bears N. and S.

Descend abruptly over sandstone ledges

Subdivision of T. 24 S., R. 17 E.

chains	
32.50	Hollow, 75 ft. deep, drains NW. Ascend abruptly 50 ft. to
34.50	Solid sandstone spur, projects N. 4 chs. Descend abruptly
35.60	Base of steep descent. Hence over solid sandstone bedrock sloping N.
39.94 <sup>1/2</sup>	Set an iron post, 3 ft. long, 1 in. in dia., 24 lbs. in a mound of stone and earth, 4 ft. base, 2 ft. high, for 1/4 sec. cor., with brass cap marked
	$\frac{1}{4}$ <u>S 14</u> S. 23 1912.
	raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
	Note: On account of natural obstacles, I am unable to set post in the ground.
72.00	Sandstone spur, projects NW. Descend 15 ft. to
79.89	The cor. of secs. 14, 15, 22 and 23. Land, mountainous draining N. Soil, solid sandstone bed rock; 4 th. rate. Timber, scattering cedar on E. 30.00 chs.
	No undergrowth. Land, mountainous or heavily timbered 79.89 chs.
	June 14, 1912

June 15: At 7<sup>h</sup> 00<sup>m</sup> a.m. l.m.t., I  
set off  $38^{\circ} 43'$  on the lat. arc;  $23^{\circ} 20'$   
N. on the decl. arc; and determine  
a. meridian with the solar at the

Subdivision of T. 24 S., R. 17 E.

chain

- cor. of secs. 14, 15, 22 and 23.  
Hence I run  
N.  $0^{\circ} 0' W.$ , bet. secs. 14 and 15.  
Over mountainous land across  
solid sandstone bed rock.  
Ascend 15 ft. to
- 8.00 Solid sandstone spur, projects NW.  
Begin descent towards Ten mile  
canyon.
- 16.00 Top of perpendicular sandstone  
ledge, 30 ft. high, bears E. and W.  
Descend abruptly into canyon.
- 20.00 Wash in Ten mile canyon, 1 ch.  
wide, some alkali water, 125 ft.  
below spur, drains S.  $80^{\circ} W.$   
Gradually ascend.
- 26.00 Base of sandstone ledges, bear  
E. and W.  
Leave canyon, ascend abruptly.
- 31.00 Top of ledges and N. side of  
canyon, bears E. + W.  
Gradually ascend.
- 40.00 Set an iron post, 3 ft. long, 1 in. in  
dia., 24 lbs. in a mound of stone  
and earth, 4 ft. base, 2 ft. high  
for  $\frac{1}{4}$  sec. cor., with brass cap  
marked
- |               |  |      |
|---------------|--|------|
| $\frac{1}{4}$ |  | S 15 |
| S 14          |  | S 14 |
- 1912.
- Raise a mound of stone, 2 ft.  
base,  $1\frac{1}{2}$  ft. high W. of cor.  
Note: On account of natural  
obstacles, I am unable to set  
post in the ground.
- 42.00 Spur, 125 ft. above canyon,  
projects SW.  
Descend 40 ft. to

Subdivision of T. 24 S., R. 17 E.

chain

53.00 Hollow, drains SW.  
Ascend 75 ft. to  
80.00 Enter said bench, bears  $580^{\circ}$  E.  
and  $S.80^{\circ}$  W.  
Set an iron post, 3 ft. long, 2 ins.  
in dia., 24 ins. in the ground  
for cor. of secs. 10, 11, 14 and 15  
with brass cap marked.

T 24 S | R 17 E

S 10	S 11
S 15	S 14

1912

dig pits,  $18 \times 18 \times 12$  ins. in each sec.  
 $5\frac{1}{2}$  ft. dist., raise a mound of  
earth, 4 ft. base, 2 ft. high W. of  
cor.

Land, mountainous, draining  
N. to Ten mile canyon on S. 20.00  
chs., and S. to same canyon on  
N. 60 chs.

Soil, sandstone bed rock and rocky,  
4th. rate.

Sub-soil, rocky.

No timber.

No undergrowth.

Mountainous land 80.00 chs.

S.  $89^{\circ}58'$  E., on random line bet.  
secs. 11 and 14.

40.00 Set temporary  $\frac{1}{4}$  sec. cor.

79.83 Intersect N. & S. line 3 lks. N. of  
the cor. of secs. 11, 12, 13 and 14  
Hence I run

N.  $89^{\circ}57'$  W., on true line bet. secs.  
11 and 14

Over mountainous land draining  
S., across solid sandstone bedrock.  
Descend 20 ft. to

Subdivision of T. 24 S., R. 17 E.

Chains:	
12.00	Hollow, drains S. Ascend 25 ft. to
14.00	Enter rolling brush land, bears N. & S. Hence over rolling land, through deep sand, greasewood undergrowth and scattering sandstone outcroppings
39.9 1/4	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked $\frac{1}{4}$ <u>S 11</u> <u>S 14</u>
	1912
	dig pits, 18 x 18 x 12 ins., E. & W. of post 3 ft. dist., raise a mound of earth, 3 $\frac{1}{2}$ ft. base, $\frac{1}{2}$ ft. high N. of cor. Leave scattering sandstone out- croppings, bear NE. & SW. Gradually ascend.
79.8 3	The cor. of secs. 10, 11, 14 and 15 Land rolling and mountainous draining S. E. 4 chs. mountainous land. Soil, sandstone bed rock, 4th rate W. 75.8 3 chs. rolling brush land. Soil, sandy and rocky; 2nd and 4th. rates. Sub-soil, sandy and rocky. Undergrowth, greasewood No timber. Good grass for grazing Mountainous land 4 chs.
	$7^{\circ} 0' 0''$ W., bet. secs. 10 and 11. Gradually descend over rolling land, through deep sand and greasewood undergrowth

Subdivision of T. 24 S., R. 17 E.

chains

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 2 1/4 ins. in the ground for 1/4 sec. cor., with brass cap marked

$\frac{1}{4}$	
S 10	S 11

1912

dig pits, 18 x 18 x 12 ins. N. and S. of post, 3 ft. dist., raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 2 1/4 ins. in the ground for cor. of secs. 2, 3, 10 and 11 with brass cap marked

T 24 S   R 17 E	
S 3'	S 2'
<hr/>	
S 10	S 11

1912

raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor.

Rand, rolling with a general N.W. drain.

Soil, sandy; 1 st. rate.

Sub-soil, rich sandy loam.

Undergrowth, greasewood.

No timber.

Good grass for grazing.

June, 15: At this sec. cor. I set off  $23^{\circ}20'$  N., on the decl. arc; and at 12<sup>h</sup>. 00<sup>m</sup>. m. l.m.t., observe the sun on the meridian; the resulting lat. is  $38^{\circ}45'$

S.  $89^{\circ}57'$  E., on random line bet. secs. 2 and 11

40.00 Set temporary 1/4 sec. cor.

Subdivision of T. 24 S., R. 17 E.

chains	
79.90	Intersect N. and S. line at the cor. of secs. 1, 2, 11 and 12. Hence I run N. $89^{\circ} 57'$ W. on true line bet. secs. 2 and 11. Over rolling sandy land through short undergrowth of greasewood
39.95	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked
	$\frac{1}{4}$ <u>S 2</u> S 11
79.90	dig pits, $18 \times 18 \times 12$ ins., E. and W. of post 3 ft. dist., raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor. The cor. of secs. 2, 3, 10 and 11. land, rolling with a general S. and W. drain. Soil, sandy; 1st. rate Sub-soil, rich sandy loam. Undergrowth, short greasewood. Good grass for grazing No timber
40.00	N. $0^{\circ} 01'$ W., on random line bet. secs. 2 and 3. Set temporary $\frac{1}{4}$ sec. cor.
80.06	Intersect N. bdy. of the tr. 19 like, N. $89^{\circ} 44'$ E. of the cor. of secs. 2, 3, 34 and 35 heretofore described Hence I run. S. $0^{\circ} 09'$ E., on true line bet. secs. 2 and 3. Over mountainous land

Subdivision of T. 24 S., R. 17 E.

Chains.	
13.00	Descend abruptly over ledges 100 ft. to wash in hollow, 1 ch. wide, 20 ft. deep. drains W.
15.10	Ascend abruptly 50 ft. to rocky spur, projects W.
30.00	Descend over ledges 60 ft. to wash, in hollow, 1 ch. wide, 10 ft. deep, drains W.
40.06	Ascend 50 ft. to On spur, projects W. Set an iron post, 3 ft. long, 1 in. in dia., $\frac{1}{4}$ in. in a mound of stone, 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor. with brass cap marked.
	$\frac{1}{4}$ S 3   S 2
	1912
	raise a mound of stone, 2 ft. base, $\frac{1}{2}$ ft. high W. of cor.
	Note: On account of natural obstacles, I am unable to set post in the ground.
	A red sandstone pinnacle, 30 ft. high bears E. 1 ch.
49.00	Descend 50 ft. to wash in hollow, 2 chs. wide, 10 ft. deep, drains W.
58.00	Ascend 75 ft. to spur, projects W.
68.00	Descend. wagon road from Green river, Utah to Moab, Utah, bears N. $80^{\circ}$ E and W.
	Leave mountainous land, enter rolling land.
70.00	wash, 35 ft. below spur, drains NW.
80.06	The cor. of secs. 2, 3, 10 and 11.

Subdivision of T. 24 S., R. 17 E.

chain.

Land, mountainous and rolling  
draining W.  
N. 68 chs. mountainous land  
S 12.06 chs. rolling land.  
Soil, rocky and gypsum, 4th  
rate  
Sub-soil, rocky.  
No timber.  
No undergrowth.

June 15, 1912.

June 17: At 8<sup>h</sup>. 01<sup>m</sup>. a.m. l.m.t., I  
set off  $38^{\circ} 41'$  on the lat. arc;  $23^{\circ} 24'$   
N., on the decl. arc; and  
determine a meridian with the  
solar at the cor. of secs. 3, 4, 33  
and 34 on the S. bdy. of the tp.  
Heretofore described.

Thence I run

N.  $0^{\circ} 02'$  W., bet. secs. 33 and 34.  
Over mountainous land sloping  
N., through short undergrowth  
of shadscale.

Gradually descend.

20.00 Top of perpendicular sandstone  
ledge 60 ft. high and S. side of  
deep canyon, bears E. + W.  
Descend abruptly into canyon.

33.50 Wash in bottom of canyon,  
75 lks. wide 280 ft. below top,  
drains W.

Ascend abruptly over ledges and  
steep south slope of solid  
sandstone bedrock.

40.00 Point for  $\frac{1}{4}$  sec. cor. falls on steep  
slope of solid bed rock. I am  
unable to set a cor. at this point.

47.35 Top of perpendicular sandstone  
ledge 50 ft. high and north side

Subdivision of T. 24 S., R. 17 E.

chains.

of Canyon 300 ft. above bottom  
brave N. 60° W. and S. 60° E.  
At this point, I set an iron post,  
3 ft. long, 1 in. in dia., 2 1/4 ins. in a  
mound of stone and earth, 4 ft.  
base, 2 ft. high, for witness  
cor. to the 1/4 sec. cor. with  
brass cap marked

T 24 S R 17 E

S 33	S 34
------	------

W.C. 1/4

1912

raise a mound of stone, 2 ft.  
base, 1 1/2 ft. high W. of cor.

Note: On account of natural  
obstacles I am unable to set post  
in the ground.

Gradually ascend.

60.00 Rocky ridge, 70 ft. above witness  
cor., brave E. and W.

Descend 50 ft. to

75.00 Top of 30 ft. ledge and E. side of  
Ten mile Canyon, bears NE. and  
SW. 5 cha., thence NW.

Descend abruptly 125 ft. to

80.00 Set an iron post, 3' ft. long, 2 in.  
in dia., 2 1/4 ins. in a mound of  
stone and earth, 4 ft. base, 2 ft.  
high for cor. of secs. 27, 28, 33  
and 34, with brass cap marked

T 24 S R 17 E

S 28	S 27
------	------

S 33	S 34
------	------

1912.

raise a mound of stone, 2 ft.  
base, 1 1/2 ft. high W. of cor.

Subdivision of T. 24 S., R. 17 E.

Chains	
	Note: On account of natural obstacles, I am unable to set post in the ground.
	Land, mountainous draining W.
	Soil, rocky; 4th rate.
	Sub-soil, rocky.
	No timber.
	Undergrowth, short shadscale.
	Mountainous land 8000 cha.
	S. $89^{\circ} 59'$ E., on random line bet. secs. 27 and 34.
40.00	Set temporary $\frac{1}{4}$ sec. cor.
80.02	Intersect N. and S. line, 3 lks. N. of the cor. of secs. 26, 27, 34 and 35.
	Hence I run
	N. $89^{\circ} 58'$ W., on true line bet. secs. 27 and 34.
	Over mountainous land draining NW., through short undergrowth of shadscale.
9.50	Mash, 20 lks. wide, 3 ft. deep, drains NW.
40.01	Set an iron post, 3 ft. long, 1 in. midia, 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked $\frac{1}{4}$
	<u>S 27</u> <u>S 34</u>
	1912
	dig pits, $18 \times 18 \times 12$ ins., E. and W. of post, 3 ft. dist., raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
41.00	Mash, 30 lks. wide, 5 ft. deep. drains NW. Ascend 70 ft. to

Subdivision of T. 24 S., R. 17 E.

chains

58.00 Top of solid sandstone spur,  
projects N.  
Descend 50 ft. to

74.80 Top of 25 ft. ledge and E. side of  
Ten mile Canyon, bears NW. and  
SW.

Descend abruptly 60 ft. to  
76.20 Wash in hollow, 10 lks. wide,  
drains NW.

Hence over steep N. slope of  
canyon.

80.02 The cor. of secs. 27, 28, 33 and 34.  
Land, mountainous draining NW.  
E. 74.80 chs. rolling mountain top  
Soil, gravelly and rocky; 3rd. and  
4th. rates.

Sub-soil, rocky within 3 ft. of surface.  
Undergrowth, shadscale.

Some good grass for grazing.  
W. 5.22 chs. steep slope of Ten  
mile canyon.

Soil, rocky: 4th rate. on rocky  
sub-soil.

No undergrowth.

No timber.

Mountainous land 80.02 chs.

June 17: At this sec. cor., I set off  
 $23^{\circ} 24' N.$ , on the decl. arc; and  
at  $12^h 01^m$  p.m. I. m.t., observe  
the sun on the meridian; the  
resulting lat. is  $38^{\circ} 42'$

N.  $0^{\circ} 02' W.$ , bet. secs. 27 and 28  
Over rough mountainous land  
draining west, along east side  
of Ten mile Canyon.

Descend abruptly over steep N.  
slope 75 ft. to

2.20 Wash in hollow, 10 lks. wide,

Subdivision of T 24 S., R. 17 E.

chains

- drains NW.  
Ascend abruptly over ledges 150 ft. to  
6.70 High rock point projects W. 3 chs.  
Descend abruptly over ledges, 300 ft. to  
25.00 Wash in hollow, 50 lks. wide, 10 ft. deep, drains W.  
Ascend abruptly over ledges.  
31.50 High rock point, 300 ft. above wash,  
projects W. 300 chs.  
Descend abruptly over ledges, 225 ft. to  
40.00 Set an iron post, 3 ft. long, 1 in.  
in dia., 24 in. in the ground for  
 $\frac{1}{4}$  sec. cor., with brass cap  
marked  $\frac{1}{4} \text{ S } 28 | S 27$   
dig pits, 18 x 18 x 12 in., N. and S.  
of post, 3 ft. dist.; raise a  
mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high W. of cor.  
Gradually descended.  
48.00 Wash in hollow, 25 lks. wide, 5 ft.  
deep, drains W.  
Ascend abruptly over ledges.  
52.80 Top of rock point, 150 ft. above  
wash, projects W. 1 ch.  
Then over rocky land facing  
nearly west, gradually descending  
over ledges.  
80.00 On low rocky spur, projects NW.  
Set an iron post, 3 ft. long, 2 in.  
in dia., 24 in. in a mound of  
stone 4 ft. base, 2 ft. high for cor.  
of secs. 21, 22, 27 and 28 with

Subdivision of T. 24 S., R. 17 E.

chains

brass cap marked:

T 24 S	R 17 E
S 21	S 22
S 28	S 27

1912.

raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high W. of cor.

Note: On account of natural  
 obstacles I am unable to set post  
 in the ground.

Land, mountainous draining W.  
 and forming E. wall of Ten  
 mile Canyon.

Soil, rocky; 4 th. rate.

Sub-soil, rocky.

No timber.

No Undergrowth.

Mountainous land 80.00 chs.

June 17, 1912.

June 18: At 7<sup>h</sup>. 01<sup>m</sup>. a.m. l.m.t., I  
 set off  $38^{\circ} 43'$  on the lat. arc;  $23^{\circ} 26'$   
 N., on the decl. arc; and determine  
 a meridian with the solar at the  
 cor. of secs. 21, 22, 27 and 28.

Hence I run

$S 89^{\circ} 58'$  E., on random line bet. secs.  
 22 and 27.

40.00 Set temporary  $\frac{1}{4}$  sec. cor.

80.06 Intersect N. and S. line 5 lks. S. of  
 the cor. secs. 22, 23, 26 and 27.

Hence I run

West, on true line bet. secs. 22 and  
 27.

Over broken mountainous land  
 draining NW., across solid sand-  
 stone bed rock.

Subdivision of T. 24 S., R. 17 E.

chains.

- 10.00 Leave solid sandstone bedrock,  
bears N. and S.  
Enter rocky land and scattering  
cedar timber.  
Gradually descend towards Ten  
Mile Canyon.
- 40.03 Set an iron post, 3 ft. long, 1 in. in  
dia., 24 ins. in a mound of stone  
and earth, 4 ft. base, 2 ft. high for  
 $\frac{1}{4}$  sec. cor.; with brass cap  
marked  $\frac{1}{4}$   
S 22  
S 27
- 1912.
- raise a mound of stone, 2 ft. base  
 $\frac{1}{4}$  ft. high, N. of cor.  
Note: On account of natural  
obstacles, I am unable to set  
post in the ground.
- 44.50 Top of perpendicular sandstone  
ledge and E. side of box canyon,  
bears N. and S.  
Descend abruptly 100 ft. to  
wash in bottom of canyon, 20 ft.  
wide, coarse N.
- 49.80 Ascend abruptly over ledges, 125 ft.  
to  
53.60 Top of narrow rock point, projects  
N. 6 chs.  
Descend abruptly over high ledge  
into Ten mile Canyon.
- 64.20 Wash, in Ten mile Canyon, 1 ch.  
wide, some alkali water, 190 ft.  
below rock point, drains S.  
Ascend 75 ft. to
- 68.00 Low rocky spur, projects S.  
Descend 75 ft. to
- 71.40 Wash in Ten Mile canyon, 1 ch.

Subdivision of T. 24 S., R. 17 E.

chain.

wide, some alkali water, drains NW.

Ascend 80 ft. to

80.06 The cor. of secs. 21, 22, 27 and 28.  
Land, mountainous, draining NW.

Soil, rocky; 4 th. rate.

Sub-soil, solid sandstone bed rock,  
close to surface.

No Undergrowth.

Timber, some scattering scrub-  
cedar.

Land mountainous or heavily  
timbered 80.06 chs.

June 18: At this sec. cor., I set  
off  $23^{\circ} 26' N.$  on the decl. arc;  
and at  $12^{\circ} 01' m. p.m. l.m.t.$ ,  
observe the sun on the meridian,  
the resulting lat. is  $38^{\circ} 43'$

N.  $0^{\circ} 0' W.$ , bet. secs. 21 and 22.

Over mountainous land, in  
bottom of Ten Mile Canyon.

Descend over series of small ledges  
75 ft. to

6.00 Wash in Ten Mile Canyon, 1ch.  
wide, some alkali water, course  
at bend from SE. to SW.

Gradually ascend.

13.00 Base of perpendicular sandstone  
ledge, 150 ft. high, bears E. & W.  
Leave canyon, ascend abruptly.

15.75 Top of ledges and west side of  
Ten mile canyon, 200 ft. above  
base, bears E. and SW.

Hence gradually ascend over  
land sloping nearly south.

40.00 Set an iron post, 3 ft. long, 1m.  
in dia., 24 ins. in the ground for  
 $\frac{1}{4}$  sec. cor., with brass cap

Subdivision of T. 21 S., R. 17 E.

chains.

marked

$\frac{1}{4}$	
S 21	S 22

1912

dig pits,  $18 \times 18 \times 12$  ins., N. and S. of post, 3 ft. dist., raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

50.60 Top of sandstone knoll, 20 ft. high, bears E. & W.  
Gradually descend.

75.00 Small hollow, drains E.  
Ascend

80.00 Set an iron post, 3 ft. long,  $\frac{1}{2}$  in. in dia.,  $2\frac{1}{4}$  ins. in the ground for cor. of secs. 15, 16, 21 and 22 with brass cap marked

T 24 S | R 17 E

S 16	S 15
S 21	S 22

1912

dig pits,  $18 \times 18 \times 12$  ins., in each sec.  $5\frac{1}{2}$  ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high W. of cor.

Land, mountainous, draining S. S. 15.75 chs. rough mountainous land in Ten Mile Canyon.

N. 64.25 chs. rolling mountainous land.

Soil, rocky and sandy, 4 th. rate  
Sub-soil, gravelly and rocky.

No timber

Undergrowth, some short shadscale, on N. 64.75 chs.

Good grass for grazing on N. 64.75 chs.  
Mountainous land 80.00 chs.

Subdivision of T. 24 S., R. 17 E.

chains

- East, on random line bet. secs.  
15 and 22.
- 40.00 Set temporary  $\frac{1}{4}$  sec. cor.
- 80.08 Intersect N. and S. line 9 eks. N.  
of the cor. of secs. 14, 15, 22 and 23.  
Hence I run  
N.  $89^{\circ} 56' W.$ , on true line bet. secs.  
15 and 22
- Over mountainous land across  
solid sandstone bed rock.
- 9.10 Top of ledge, 140 ft. high and  
east side of Ten Mile canyon,  
bears NW. and SE.
- Hence descend abruptly 175 ft. to  
junction of two canyons; Trail  
Canyon from SE. and Ten  
Mile Canyon from N.; wash in  
canyon 2.50 chs. wide, some  
alkali water, drains S.
- Ascend abruptly from canyon  
over ledges.
- 22.40 Top of sandstone ledge and west  
side of canyon, 100 ft. above base,  
bears N. and S.
- Hence gradually ascend over  
solid sandstone bed rock  
sloping nearly S. to canyon.
- 40.04 Set an iron post, 3 ft. long, 1 in.  
in dia.,  $\frac{3}{4}$  in. in a mound of  
stone and earth, 4 ft. base, 2 ft.  
high, for  $\frac{1}{4}$  sec. cor., with  
brass cap marked
- $\frac{1}{4}$   
S 15'  
S 22'  
1912.
- raise a mound of stone, 2 ft.  
base,  $1\frac{1}{2}$  ft. high N. of cor.

Subdivision of T. 24 S., R. 17 E.

Chains.	
	Note: On account of natural obstacles, I am unable to set post in the ground.
74.00	Leave solid sandstone bed rock, bears N. and S. Hence over sandy land, through short undergrowth of shadscale.
80.08	The cor. of secs. 15, 16, 21 and 22. Land, mountainous E. 9.10 chs. east side of canyon, land draining W. W. 57.8 chs. north side of canyon, land draining S. Soil on E. 7.4 chs. solid sand stone bed rock; 4th rate. on W. 6.08 chs. soil, sandy on sandy and gravelly sub-soil; 3rd rate. No timber. Undergrowth, short shadscale on W. 6.08 chs.
	Mountainous land, 80.08 chs.

June 18, 1917

June 19: at 7<sup>h</sup>. 01<sup>m</sup>. a.m. l.m.t., I  
set off  $38^{\circ} 43'$  on the lat. arc;  $23^{\circ}$   
 $27' N.$ , on the decl. arc; and  
determine a meridian with the  
solar at the cor. of secs. 15, 16, 21  
and 22.

Hence I run  
N.  $0^{\circ} 02'$  W., bet. secs. 15 and 16.  
Over hilly land draining SE.  
Gradually ascend through deep  
sand and short shadscale  
undergrowth.

13.00	Top of south side of sand ridge, 50 ft. above sec. cor., bears E. and W.
19.00	North side of sand ridge, bears E. and W.

Subdivision of T. 24 S., R. 17 E.

Chains

24. 50 Descend abruptly, 75 ft. to  
Base of sand ridge, bears E.  
and W.

10.00 Hence over rolling sandy land.  
Set an iron post, 3 ft. long, 1 in.  
in dia., 2 $\frac{1}{4}$  in. in the ground for  
 $\frac{1}{4}$  sec. cor., with brass cap  
marked

$\frac{1}{4}$	
S 16	S 15

1912.

Dig pits, 18 x 18 x 12 in., N. and S.  
of post 3 ft. dist., raise a  
mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$   
ft. high W. of cor.

80.00 Set an iron post, 3 ft. long, 2 in.  
in dia., 2 $\frac{1}{4}$  in. in the ground  
for cor. of secs. 9, 10, 15 and 16,  
with brass cap marked

T 24 S	R 17 E
S 9	S 10
<hr/>	
S 16	S 15

1912

Dig pits, 18 x 18 x 12 in. in each  
sec., 5 $\frac{1}{2}$  ft. dist., raise a mound  
of earth, 4 ft. base, 2 ft. high W.  
of cor.

Land hilly and rolling draining  
SE. on S. 13 chs. and W. on N. 61  
chs.

S. 24.50 chs. hilly land. N. 55.50 chs.  
rolling land.

Soil, sandy; 2<sup>nd</sup> rate.

Sub-soil, sandy.

Under growth, shadscale.

Good grass for grazing purposes.

Subdivision of T. 24 S., R. 17 E.

Chains.

	S. $89^{\circ} 56'$ E., on random line bet. secs. 10 and 15.
40.00	Set temporary $\frac{1}{4}$ sec. cor.
80.06	Intersect N. and S. line 12 lks. N. of the cor. of secs. 10, 11, 14 and 15. Hence I run:
	N. $89^{\circ} 51'$ W., on true line bet. secs. 10 and 15.
	Gradually descend over rolling sandy land, through short undergrowth of shadscale.
110.03	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked <u>14</u>
	<u>S 10</u>
	<u>S 15</u>
	1912.
	dig pits, $18 \times 18 \times 12$ ins., E. and W. of post, 3 ft. dist., raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
80.06	The cor. of secs. 9, 10, 15 and 16. Land rolling draining southwest-eily. Soil, sandy and gravelly; 3rd. rate sub-soil, gravelly and rocky Undergrowth, short shadscale. No timber.
	N. $0^{\circ} 02'$ W., bet. secs. 9 and 10. Over rolling sandy land through short undergrowth of shadscale. Gradually ascend.
6.00	Low flat ridge, bears E. and W. Gradually descend over land facing N.
38.00	Leave sandy land, enter solid

Subdivision of T. 24 S., R. 17 E.

chains.

sandstone bed rock, bears E. and W.

40.00 Set an iron post, 3' ft. long, 1 in. in dia., 2 $\frac{1}{4}$  in. in a mound of stone and earth, 4 ft. base, 2 ft. high for  $\frac{1}{4}$  sec. cor., with brass cap marked

$\frac{1}{4}$	
S 9'	S 10'

raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.

Note: On account of natural obstacles I am unable to set post in the ground.

80.00 Set an iron post, 3' ft. long, 2 in. in dia., 2 $\frac{1}{4}$  in. in a mound of stone, 4 ft. base, 2 ft. high for cor. of secs. 3, 4, 9 and 10 with brass cap marked

T 24 S	R 17 E
S 4'	S 3'

S 9'	S 10'
------	-------

19 12

raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Note: On account of natural obstacles, I am unable to set post in the ground.

Land, rolling draining North and West.

S. 38 chs. rolling sandy land. soil, sandy on rich sandy loam sub-soil, 1st rate. Bed rock between 3 and 4 ft. of surface. Good grass for grazing. Undergrowth short shadscale.

Subdivision of T. 24 S., R. 17 E.

chain:

North 42 chs. rocky land sloping N. Soil, solid sandstone bed rock; 4th rate. No grass. No undergrowth. No timber.

June 19: At this sec. cor. I set off  $23^{\circ} 26' N.$ , on the decl. arc; and at  $12^{\text{h}} 01^{\text{m}}$ . p.m. l.m.t., observe the sun on the meridian; the resulting lat is  $38^{\circ} 45'$

S.  $89^{\circ} 51'$  E., on random line bet. secs. 3 and 10.

40.00 Set temporary  $\frac{1}{4}$  sec. cor.

80.10 Intersect N. + S. line at the cor.

of secs. 2, 3, 10 + 11.

Hence, I run

N.  $89^{\circ} 51'$  W., on true line bet. secs. 3 and 10.

Gradually descend over rolling sandy land, through short undergrowth of shadscale.

39.00 Leave sandy land and shadscale undergrowth, enter solid sandstone bed rock, bears N. and S.

40.05 Set an iron post, 3 ft. long, 1 in. in dia.,  $2\frac{1}{4}$  in. in a mound of stone and earth, 4 ft. base, 2 ft. high for  $\frac{1}{4}$  sec. cor., with brass cap marked.

$\frac{1}{4}$

S 3

S 10

19.12

raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Note: On account of natural obstacles I am unable to set post.

Subdivision of T. 24 S., R. 17 E.

Chain's	
80.10	<p>in the ground.</p> <p>The cor. of secs. 3, 4, 9 and 10.</p> <p>Land, rolling draining SW.</p> <p>Soil, E. 39 chs. sandy and gravelly; 3rd rate. Sub-soil, gravelly and rock. West 44.10 chs. soil, sandstone bed-rock; 4th rate.</p> <p>Undergrowth, short shadscale on E. 39 chs.</p> <p>No timber.</p> <p>Good grass for grazing on E. 39 chs.</p>
40.09	N. 0° 0' W., on random line bet. secs. 3 and 4.
79.82	<p>Set temporary <math>\frac{1}{4}</math> sec. cor.</p> <p>Intersect N. bdy. of the tp. at the cor. of secs. 3, 4, 33 and 34 heretofore described</p> <p>Hence I run</p> <p>S. 0° 0' E., on true line bet. secs. 3 and 4.</p> <p>Over mountainous land draining SW.</p> <p>Descend 20 ft. to</p>
2.80	<p>Wash, 50 lcs. wide, 10 ft. deep,</p> <p>drains SW.</p> <p>Ascend 30 ft. to</p>
5.80	<p>Low spur, projects W.,</p> <p>Descend 30 ft. to</p>
9.80	<p>Wash, 50 lcs. wide, 10 ft. deep,</p> <p>drains W.</p> <p>Ascend 50 ft. to</p>
28.80	<p>Top of sandy and rocky ridge,</p> <p>bears E. and W.</p> <p>Descend 70 ft. to</p>
39.82	<p>Set an iron post, 3 ft. long, 1 in. in dia., <math>\frac{1}{4}</math> ins. in a mound of stone, and earth, 4 ft. base, 2 ft. high for <math>\frac{1}{4}</math> sec. cor, with brass</p>

Subdivision of T. 24 S., R. 17 E.

chains

cap marked

1/4	S 4	S 3
-----	-----	-----

1912.

raise a mound of stone 2 ft. base,  
1/4 ft. high W. of cor.

Note: On account of natural  
obstacles I am unable to set post  
in the ground.

Continue to descend.

47.85 Top of vertical sandstone ledge,  
70 ft. high, and N. side of box  
canyon, bears E. and W.  
Descend abruptly 90 ft. to

48.80 Wash in bottom of canyon, 1 ch.  
wide, coarse W.

Ascend abruptly from canyon.

53.80 Top of perpendicular sandstone  
ledge, 75 ft. high and south side of  
canyon, bears E. and W.  
Ghenc over solid sandstone  
bed rock.

68.30 Wash, 15 lks. wide, 10 ft. deep,  
drains W.

Gradually ascend.

79.82 The cor. of secs. 3, 4, 9 and 10.  
Sand mountainous, draining  
S. on N. 47.85 chs. and N. on S.  
26.02 chs.

Soil, sandstone bed rock and  
gravelly; 4 th. rate.

No timber.

No Undergrowth.

No grass.

Mountainous land 79.82 chs.

June 19, 1912

June 20: at 7<sup>th</sup> 31<sup>m</sup>. a.m. l.m.t.

Subdivision of T. 24 S., R. 17 E.

chains	I set off $38^{\circ} 41'$ on the lat. arc; $23^{\circ} 27'$ N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 4, 5, 32 and 33 on the S. bdy. of the tp. heretofore described. Hence I run $N. 0^{\circ} 03'$ W., bet. secs. 32 and 33. Over rough mountainous land in bottom of Ten Mile canyon. Ascend abruptly over ledges.
5.00	Top of rocky point, 75 ft. above sec. cor., projects W. 2 chs.
9.70	Descend abruptly over ledges 75 ft. to wash in bottom of Ten Mile canyon, 1 ch. wide, some alkali water, drains W. Begin abrupt ascent over ledges.
17.00	Top of abrupt ascent, 100 ft. above wash, bears E. and W. Hence gradually ascend over solid sandstone bench.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 2 1/2 ins. in a mound of stone, 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., with brass cap, marked
	$\frac{1}{4}$ S 32   S 33
	1912.
	raise a mound of stone, 2 ft. base, $\frac{1}{4}$ ft. high, W. of cor.
	Note: On account of natural obstacles, I am unable to set post in the ground.
57.80	Base of 60 ft. sandstone ledge, bears NE. and SW.
	Ascend abruptly.
59.00	Top of ledge and north side of

Subdivision of T. 24 S., R. 17 E.

chains

Ten mile canyon, 300 ft. above wash, bears NE. and SW.  
Enter sandy bench land.

Gradually ascend.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 2 1/4 ins. in the ground for cor. of secs. 28, 29, 32 and 33 with brass cap marked

T 24 S | R 17 E

S 29 | S 28

— S 32 | S 33 —

19 1/2.

Dig pits, 18 x 18 x 12 ins. in each sec., 5 1/2 ft. dist., raise a mound of earth 4 ft. base, 2 ft. high W. of cor.

Land, mountainous and rolling, draining SW. S. 59 chs. rough mountainous land forming west side of Ten Mile canyon. Soil, solid sandstone bed rock and covered with loose boulders; 4th. rate. No timber or undergrowth.

N. 21 chs. rolling bench land.

Soil, sandy and gravelly; 2nd. rate. sub-soil, rich sandy loam. Undergrowth some short shadscale. Good grass for grazing purposes.

Mountainous land 59 chs.

S. 89° 59' E., on random line bet. secs. 28 and 33.

14.00 Set temporary 1/4 sec. cor.

80.00 Intersect N. & S. line 3 lks. S. of the cor. of secs. 27, 28, 33 and 34.

Theyce 2 run.

Wrist, on true line bet. secs. 28

Subdivision of T. 24 S., R. 17 E.

chains.

and 33.

Over mountainous land draining N. into Ten mile canyon, through short undergrowth of shadscale.

Descend 30 ft. to

4.60 Wash in hollow, 10 lks. wide, drains N.

Ascend abruptly 150 ft. over ledges to.

15.00 Top of ledges and edge of Ten mile canyon, bears N. and S. Ghenc across series of sandstone pinnacles.

17.00 Rocky point, projects N. 6 chs.

Descend abruptly over ledges into Ten mile Canyon, bears N. and S.  $70^{\circ}$  W.

26.00 Wash in Ten Mile Canyon, 1 ch. wide, some alkali water, 225 ft. below top, drains S.

Ascend 50 ft. to

33.00 Low rocky spur in canyon, projects S.

Descend 50 ft. to

38.00 Same canyon wash, drains NW. Ascend

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for  $\frac{1}{4}$  sec. cor., with brass cap marked

$\frac{1}{4}$   
S 28

S 33

1912

raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high N. of cor.

44.00 Rocky bench, 60 ft. above canyon, bears NW. and SE. Gradually descend.

Subdivision of T. 24 S., R. 17 E.

chains.

53.00	Leave bench, bears N. and S. Descend abruptly 75 ft. to
55.00	Same wash in canyon, 1 ch. wide, drains S. Ascend abruptly from canyon over ledges and boulders.
63.75	Top of ledges and west side of Ten mile Canyon, 275 ft. above base, bears N. and S. Enter sandy bench land. Gradually ascend through scattering undergrowth of shadscale.
80.00	The cor. of secs. 28, 29, 32 and 33. Land mountainous and rolling with a general drain top N. to Ten mile canyon, which drains S. E. 63.75 chs. rough mountainous land. Soil, rocky and some solid sandstone bed rock; 4 th. rate. Sub-soil rocky. Undergrowth some short shadscale. No timber. W. 16.25 chs. rolling bench land. Soil, sandy and gravelly; 2 nd. rate on rich sandy loam sub- soil. Undergrowth, short shadscale. No timber. Some good grass for grazing. Mountainous land 63.75 chs. June 20: At this sec. cor. I set off $23^{\circ} 27'$ N., on the decl. arc; and at $12^{\text{h}} 01^{\text{m}}$ . p.m. l.m.t., observe the sun on the meridian; the resulting lat. is $38^{\circ} 42'$

77.0° 0' W., bet. secs. 28 and 29.  
Over rolling sandy bench, through  
short undergrowth of shadscale.

Subdivision of T. 24 S., R. 17 E.

Chains

	Gradually ascend.
23.00	Leave sandy land, enter solid sandstone bed rock.
	Gradually descend.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground, for sec. cor., with brass cap marked
	$\frac{1}{4}$ S. 29   S. 28

1912

raise a mound of stone, 2 ft. base,  $\frac{1}{4}$  ft. high W. of cor.

Note: On account of natural obstacles, I am unable to set post in the ground.

51.00	Hollow, $\frac{1}{4}$ ft. deep, drains E. Leave solid sandstone bed rock, enter sandy land.
	Gradually ascend.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 20, 21, 28 and 29 with brass cap marked

T. 24 S	1912 E
S. 26	S. 27
S. 29	S. 28

1912

dig pits,  $18 \times 18 \times 12$  ins. in each sec.,  $\frac{5}{4}$  ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high W. of cor.

Pond rolling with general E. drain. Soil, sandy and sandstone bed rock; 2nd. and 11th. rates.

Subdivision of T. 24 S., R. 17 E.

chains

Sub-soil, rich sandy loam on S.  
23 chs. and N. 29 chs.  
Undergrowth, short shadscale.  
No timber.  
Good grass for grazing on S. 23 chs.  
and N. 29 chs.

- East, on random line, bet. secs.  
21 and 28.  
40.00 Set temporary  $\frac{1}{4}$  sec. cor.  
80.00 Intersect N. and S. line 5 lks. N.  
of the cor. of secs. 21, 22, 27 and 28.  
Hence, I run  
N.  $89^{\circ} 58'$  W., on true line bet. secs.  
21 and 28.  
Over mountainous land in bottom  
of Ten Mile Canyon.  
Descend over rocky land facing W.  
5.60 Wash. in Ten Mile canyon, 1.50 chs.  
wide, some alkali water, 70 ft. below  
sec. cor. drains S.  
Leave canyon, ascend abruptly  
over ledges and boulders.  
18.00 Top of ledges and west side of Ten  
mile canyon, 250 ft. above base,  
bears N.E. and S.  
Enter sandy brush.  
Gradually ascend through short  
undergrowth of shadscale.  
40.01 Set an iron post, 3 ft. long, 1 in. in  
dia., 24 in. in the ground for  $\frac{1}{4}$   
sec. cor., with brass cap marked

$\frac{1}{4}$ ,  
S 21

S 28

19.12

dig pits, 18 x 18 x 12 in., E. and W.  
of post, 3 ft. dist., raise a mound

Subdivision of T. 24 S., R. 17 E.

chains	of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
69.00	the group of small sandstone outcroppings bear S. 2 chs.
80.00	The cor. of secs. 20, 21, 28 and 29. Land, rolling and mountainous, with a general S. drain. E. 18 chs. Mountainous land in Ten mile canyon. Soil, rocky, 1st rate on rocky sub-soil. No timber Undergrowth, some short shadscale. W 6 or 8 chs. rolling brush land Soil, sandy and gravelly; 2nd rate on rich sandy loam sub-soil. Undergrowth, short, shadscale. No timber. Good grass for grazing. Mountainous land 18.00 chs.
	June 20, 1912

June 21: At 7<sup>h</sup>. 0<sup>m</sup>. a.m. l.m.t., I  
set off  $38^{\circ} 43'$  on the lat. arc;  $23^{\circ} 28'$   
N. on the decl. arc; and determine  
a meridian with the solar at the  
cor. of secs. 20, 21, 28 and 29.

Hence I run

$71.0^{\circ} 03' W$ , bet. secs. 20 and 21.

Over rolling sandy land draining  
E., through short undergrowth  
of shadscale.

Gradually ascend.

27.00 Top of ridge on E. end, 75 ft. above  
sec. cor., bears W.  
Descend 50 ft. to

40.00 Set an iron post, 3 ft. long, 1 in.  
in dia., 2 $\frac{1}{4}$  ins. in the ground  
for  $\frac{1}{4}$  sec. cor., with brass cap  
marked

$\frac{1}{4}$   
S20 | S21

1912

Subdivision of T. 24 S., R. 17 E.

chains:

dig pits,  $18 \times 18 \times 12$  ins., N. and S. of post, 3 ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high W. of cor.

Continue gradual descent

76.00 Small wash drains W.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 16, 17, 20 and 21 with brass cap marked

T 24 S | R 17 E

S 17 | S 16

— | —

S 20 | S 21

1912.

dig pits,  $18 \times 18 \times 12$  ins. in each sec.  $5\frac{1}{4}$  ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high W. of cor.

Land hilly, draining E. on S. 27 chs. and NW. on N. 53 chs.

Soil, sandy and gravelly; 2nd rate.

Sub-soil, gravelly and rocky.  
No timber.

Undergrowth, short shadscale.

Good grass for grazing

S.  $89^\circ 58'$  E., on random line bet. secs. 16 and 21.

40.00 Set temporary  $\frac{1}{4}$  sec. cor.

Intersect N. and S. line 5 eks. N. of the cor. of secs. 15, 16, 21 and 22. Hence I run

N.  $89^\circ 56'$  W., on true line bet. secs. 16 and 21.

Over: sandy land sloping S., through short undergrowth of

Subdivision of T. 24 S., R. 17 E.

chains	
	Shadscale.
24.00	Gradually descend 40 ft. to wash, 20 lks. wide, 5 ft. deep, drains SW.
	Gradually ascend.
33.00	Sandstone spur, projects SW. Descend across solid sandstone bed rock.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in a mound of stone and earth, 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., with brass cap marked
	$\frac{1}{4}$ S 16'
	<hr/>
	S 21'
	1912
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
	Note: On account of natural obstacles I am unable to set post in the ground.
41.00	Leave solid sandstone bed rock, bears N. and S.
	Hence across sandy land.
80.00	The cor. of secs. 16, 17, 20 and 21. Land, rolling, draining SW.
	Soil, sandy and rocky; 2nd and 4th rates
	Sub-soil, gravelly, rocky and some sandy loam.
	Undergrowth, short shadscale.
	No timber.
	Good grass for grazing purposes.
	<hr/>
	N. 0° 03' W., bet. secs. 16 and 17.
	Over hilly land through short undergrowth of shadscale.

Subdivision of T. 24 S., R. 17 E.

chain

- 13.50 Base of sand ridge, bears E. & W.  
Ascend 100 ft. to
- 18.00 Top of S. side of ridge, bears E. 15  
che. and W. 10 che.
- 21.00 N. side of ridge, bears E. and W.  
Leave sandy land, descend  
over rocky land sloping NW.
- 26.00 Base of ridge, 100 ft. below top,  
bears E. and W.  
Gradually descend.
- 40.00 Set an iron post, 3 ft. long, 1 in.  
in dia., 24 ins. in the ground  
for  $\frac{1}{4}$  sec. cor., with brass cap  
marked

$\frac{1}{4}$	
S 17	S 16

1912.

dig pits,  $18 \times 18 \times 12$  ins. N. & S. of  
post, 3 ft. dist., raise a mound  
of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high W.  
of cor.

- 67.00 Enter sandstone bed rock out-  
croppings, bear E. and W.
- 80.00 Set an iron post, 3 ft. long, 2 ins.  
in dia., 24 ins. in a mound of stone  
and earth, 11 ft. base, 2 ft. high for  
cor. of secs. 8, 9, 16 and 17 with  
brass cap marked

T 24 S	R 17 E
S 8	S 9
S 17	S 16

1912

raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high W. of cor.

Note: On account of natural  
obstacles, I am unable to set post

Subdivision of T. 24 S., R. 17 E.

chains

in the ground.

Land, hilly draining west.

Soil, rocky and sandy; 4th and 2nd. rates. Sandy soil on S. 21 chs.

Sub-soil, rocky.

Undergrowth, short shadscale.

No timber.

Some good grass for grazing.

S.  $89^{\circ} 56'$  E., on random line bet. secs. 9 and 16.

16.00 Set temporary  $\frac{1}{4}$  sec. cor.

79.97 Intersect N. and S. line at the cor. of secs. 9, 10, 15 and 16.

Hence I run

N.  $89^{\circ} 56'$  W., on true line bet. secs. 9 and 16.

Gradually descend over rolling land draining NW, through short undergrowth of shadscale.

39.98  $\frac{1}{4}$  Set an iron post, 3 ft. long, 1 in. in dia.,  $\frac{1}{4}$  in. in the ground for  $\frac{1}{4}$  sec. cor., with brass cap marked

$\frac{1}{4}$   
S 9

S 16

1912

Dig pits,  $18 \times 18 \times 12$  ins., E. and W. of post, 3 ft. dist., raise a mound of earth  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high N. of cor.

42.00 Top of small sandstone outcropping, bears N. and S.

79.97 The cor. of secs. 8, 9, 16 and 17.

Land, rolling draining NW.

Soil, sandy with some rocky; 2nd. and 4th. rates.

Sub-soil, rich sandy loam & rocky.

Subdivision of T. 24 S., R. 17 E.

chain

Undergrowth, short shadscale.

No timber

Good grass for grazing.

June 21: At this sec. cor., I set off  $23^{\circ} 27' N.$ , on the decl. arc; and at  $12^{\circ}. 01' m. f.m. l.m.t.$ , observe the sun on the meridian: the resulting lat. is  $38^{\circ} 44'$ .

N.  $0^{\circ} 03'$  W., bet. secs. 8 and 9.

Over rolling sandy and rocky land draining NW., through short undergrowth of shadscale.

10.00 Enter solid sandstone bedrock, bears E. and W.

25.00 Leave solid sandstone bedrock, bears E. and W.

39.00 Marsh, 1 ch. wide, 5 ft. deep, drains NW.

Gradually ascend.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for  $\frac{1}{4}$  sec. cor., with brass cap marked

$\frac{1}{4}$	
S 8'	S 9'

1912

dig pits,  $18 \times 18 \times 12$  ins., N. and S. of post, 3 ft. dist., raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high W. of cor.

Note: Cor. is situated on shifting sand.

55.00 Enter solid sandstone bedrock, bears E. and W.

76.00 Leave solid sandstone bedrock, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins.

Subdivision of T. 24 S., R. 17 E.

chains

in dia., 24 ins. in a mound of stone and earth, 4 ft. base, 2 ft. high for cor. of secs. 4, 5, 8 and 9 with brass cap marked

T 24 S | R 17 E

S 5 | S 4

S 8 | S 9

19 12

raise a mound of stone, 2 ft. base,  $1\frac{1}{4}$  ft. high W. of cor.

Note: On account of natural obstacles, I am unable to set post in the ground.

Land, rolling draining NW.

Soil, rocky and sandy; 1<sup>st</sup>. and 2<sup>nd</sup>. rates on rocky sub-soil.

Undergrowth, short shadscale  
No timber.

Some good grass for grazing purposes.

S.  $89^{\circ} 56'$  E., on random line bet. secs. 4 and 9.

Set temporary  $\frac{1}{4}$  sec. cor.

Intersect N. and S. line at the cor. of secs. 3, 4, 9 and 10.

Hence, I run

N.  $89^{\circ} 56'$  W., on true line bet. secs. 4 and 9

Over broken land, draining N., across solid sandstone bed rock. Gradually descend.

Hollow, 30 ft. deep, drains N.

Ascend 30 ft. to

Low ridge, bears N. and S.

Gradually descend.

Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground

40.00

79.98

25.00

34.00

39.99

Subdivision of T. 24 S., R. 17 E.

for  $\frac{1}{4}$  acre. cor., with brass cap  
marked.

N<sup>4</sup>

S<sup>4</sup>

S. 9:

1912

raise a mound of stone, 2 ft.  
base,  $\frac{1}{4}$  ft. high N. of cor.

60.00 Leave solid Sandstone bed rock.  
Bears N. and S.

Hence over sandy and rocky land.

119.48 The cor. of secs. 4, 5, 8 and 9.

Land, rolling draining NW.

Soil, rocky and sandy; 4th rate.

Sub-soil, rocky.

No timber.

No Undergrowth.

N.  $0^{\circ} 03'$  W., on random line bet. secs.

4 and 5

110.00 Set temporary N<sup>4</sup> sec. cor.

80.03 Intersect N. bdy. of the tp. 39 eka 1189°  
E. of the cor. of secs. 4, 5, 32 and 33

herebefore described.

Hence I run

S.  $0^{\circ} 20'$  E., on true line bet. secs. 4  
and 5.

Over broken mountainous land  
draining west, through scattering  
undergrowth of short shadscale.  
Accend 50 ft. to

6.00 Hollow, drains W.

Accend 75 ft. to

20.00 Tops of rocky ridge, bears E. and  
W.

Accend abruptly over ledges 15 ft.  
to

25.00 Wash in hollow, 15 eka. wide,  
drains W.

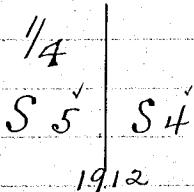
Subdivision of T. 24 S., R. 17 E.

chains

- Ascend abruptly over ledges 100 ft. to  
 30.00 Rocky ridge, bears E. and W. 2 chs.  
 Descend abruptly over ledges 100 ft to  
 36.00 At base of west point of ledge in  
 canyon, bears N. 20° E. and E.  
 Gradually descend.  
 38.55 Red wash, in. canyon, 1.50 chs wide,  
 10 ft. deep, coarse at bend from  
 E. to N. 20° W.  
 Ascend abruptly from canyon  
 over ledges.

40.03 At base of sandstone ledge 30 ft.  
 high

Set an iron post, 3 ft. long, 1 in.  
 in dia., 2 $\frac{1}{4}$  ins. in the ground for  
 $\frac{1}{4}$  sec. cor., with brass cap  
 marked



dig pits, 18 x 18 x 12 ins., N. and S.  
 of post, 3 ft. dist., raise a mound  
 of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high W.  
 of cor.

40.30 Top of ledge, bears E. and W.  
 Continue to ascend.

51.00 Sandstone ridge, 100 ft. above  
 canyon, bears E. and W.

Descend 50 ft. to

The cor. of secs. 4, 5, 8 and 9

Land, mountainous, draining W.  
 Soil, rocky on rocky sub-soil;  
 4 th. rate.

No timber.

Undergrowth, some short  
 shadscale

June 21, 1912.

Subdivision of T. 24 S., R. 17 E.

Chavis

June 22: At 7<sup>2</sup>:02<sup>m</sup>. a.m. l.m.t., I set off  $38^{\circ} 42'$  on the lat. arc;  $23^{\circ} 28' N.$ , on the decl. arc; and determine a meridian with the solar at the cor. of secs. 28, 29, 32 and 33.

Thence I run

$N. 89^{\circ} 59' W.$ , on true line bet. secs. 29 and 32.

Gradually descend over rolling sandy land draining West through short undergrowth of shadscale.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 2 $\frac{1}{4}$  ins. in the ground for  $\frac{1}{4}$  sec. cor., with brass cap marked

$\frac{1}{4}$   
S 29

S 32

1912

dig pits,  $18 \times 18 \times 12$  ins., E. and W. of post 3 ft. dist., raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high N. of cor.

53.00 Sandy ridge, bears N. & S.  
Descend 75 ft. over land facing W. to

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 2 $\frac{1}{4}$  ins. in the ground for cor. of secs. 29, 30, 31 and 32 with brass cap marked

T 24 S | R 17 E  
S 30 | S 29

S 31 | S 32

1912

dig pits,  $18 \times 18 \times 12$  ins. in each sec.  $5\frac{1}{4}$  ft. dist., raise a mound of

Subdivision of T. 24 S., R. 17 E.

chains

earth. 4 ft. base, 2 ft. high W. of cor.

Land rolling, draining W.

Soil, sandy; 2<sup>nd</sup>. rate.

Sub-soil, rich sandy loam.

Undergrowth, short shadscale.

No timber.

Good grass for grazing purposes.

S. 0° 03' E., on true line bet. secs. 31 & 32.

Over broken mountainous land  
draining west, through short  
undergrowth of shadscale.

Gradually ascend 30 ft. to

8.00 Rocky spur, projects W.

Descend 20 ft. to

15.00 Wash in hollow, 10 lks. wide,  
drains W.

Ascend 35 ft. to

29.00 Sandy ridge, bears N 50° E. and S. 50° W.

Gradually descend.

40.00 Set an iron post, 3 ft. long, 1 in. in  
dia., 2<sup>4</sup> in. in a mound of stone  
and earth, 4 ft. base, 2 ft. high for  
 $\frac{1}{4}$  sec. cor., with brass caps.  
marked

$\frac{1}{4}$	
S 31	S 32

1912

raise a mound of stone, 2 ft.  
base,  $1\frac{1}{2}$  ft. high W. of cor.

Note: On account of natural  
obstacles I am unable to set post  
in the ground.

46.50 Top of perpendicular sandstone  
ledge, 7.5 ft. high, bears E. and W  
1 ch.

Subdivision of T. 24 S., R. 17 E.

Chain:

- Descend abruptly.
- 47.75 Hollow, 100 ft. deep, drains SE.  
Ascend abruptly over ledge 100 ft.  
to
- 50.25 Solid sandstone spur, projects SE.  
Descend abruptly over ledges 150  
ft. to
- 55.00 Base of steep descent, bears NE.  
and SW.  
Hence gradually descend over  
rocky bench land sloping S. to  
Green river.
- 74.55 Top of perpendicular sandstone  
ledge 75 ft. high and left bank  
of Green river.  
Set an iron post, 3 ft. long, 1 in.  
in dia., 24 ins. in a mound of  
stone and earth, 4 ft. base, 2 ft.  
high for meander cor. of sec.  
secs. 31 and 32, with brass  
cap marked.

T 24 S R 17 E

S 31 | S 32

MC

1912

raise a mound of stone, 2 ft. base,  
1 1/2 ft. high N. of cor.

Note: On account of natural  
obstacles I am unable to set post  
in the ground

The point for cor. of secs. 5, 6, 31  
and 32 falls in Green river.

Land mountainous draining  
W. on N. 29 chs. and S. on S. 45.  
55 chs.

Soil, sandy and rocky; 4th. rate  
Sub-soil, rocky.

Undergrowth, short shadscale

Subdivision of T. 24 S., R. 17 E.

Chains.

No timber.

Some good grass for grazing on  
7.46.50 chs.

June 22: The sky is overcast at  
noon; observations for latitude  
impossible

N.  $89^{\circ} 59'$  W., on true line bet. secs.

30 and 31.

Gradually descend over mountainous land draining W.,  
through short undergrowth of  
shadscale.

- 12.00 Enter solid sandstone bed rock,  
bears N. and S.
- 30.00 Top of perpendicular sandstone ledge  
70 ft. high, and east side of box  
canyon, bears NW. and SE.
- 32.90 Descend abruptly 100 ft. to  
wash in bottom of canyon,  
drains NW.
- Note: Canyon forms a box about  
8 chs. SE.
- Ascend abruptly from canyon  
over ledges.
- 37.00 Top west side of canyon 12.5 ft. above  
base bears NW. and SE.
- Gradually descend across N. point  
of ridge.
- 40.00 Set an iron post, 3 ft. long, 1 in. in  
dia., 24 ins. in a mound of stone  
and earth, 4 ft. base, 2 ft. high  
for  $\frac{1}{4}$  sec. cor., with brass cap  
marked

14

S 30

S 31

1912

raise a mound of stone, 2 ft.

Subdivision of T. 24 S., R. 17 E.

Chains

- base,  $1\frac{1}{2}$  ft. high N. of cor.  
 Note: On account of natural obstacles  
 I am unable to set post in the  
 ground.
- 43.40 Top of perpendicular sandstone  
 ledge, 40 ft. high and south side  
 of canyon, bears NE. and SW.  
 Descend abruptly 140 ft. to
- 51.00 Wash in canyon, 25 lks. wide,  
 drains SW.  
 Gradually ascend over rocky  
 land sloping nearly south.
- 58.00 Spur, 50 ft. above wash, projects  
 SW.  
 Descend 75 ft. to
- 69.30 Base of mountain, leave rocky  
 land, bears NW. and SE.  
 Hence over river bottom through  
 dense willow undergrowth.
- 72.60 Left bank of Green river.  
 Set an iron post, 3 ft. long, 1 in.  
 in dia., 24 ins. in the ground  
 for meander cor. of fract. secs.  
 30 and 31, with brass cap marked

T24S R17E

MC S30

S31

1912

dig pit,  $36 \times 36 \times 12$  ins., E. of post  
 8 ft. dist., raise a mound of earth  
 4 ft. base, 2 ft. high E. of cor.  
 Land, mountainous and level.  
 E. 69.30 chs. mountainous land  
 draining W. to Green river.  
 Soil, rocky on rocky sub-soil; 4th  
 rate. No timber. Undergrowth  
 some short shadscale.  
 W 3:30 chs. level river bottom.  
 Soil, rich river silt; 1st rate.

Subdivision of T. 24 S., R. 17 E.

Chamis.

Sub-soil, black loam very rich.  
Undergrowth, dense willow.  
Land mountainous or covered  
with dense undergrowth 69.30 chs.

June 22, 1912.

June 24: At 7<sup>h</sup> 02<sup>m</sup> a.m. I m.t.,  
I set off  $38^{\circ} 42'$  on the lat. arc;  
 $23^{\circ} 27'$  N., on the decl. arc; and  
determine a meridian with the  
solar at the cor. of secs. 29, 30, 31  
and 32.

Hence I run

N.  $0^{\circ} 03'$  W., bet. secs. 29 and 30.

Over mountainous land draining  
west, through short undergrowth  
of shadscale.

Gradually descend over solid  
sandstone outcroppings.

26.00 Wash, 20 lks. wide, 3 ft. deep,  
drains NW.

Gradually ascend

40.00 Set an iron post, 3 ft. long, 1 in.  
in dia., 24 ins. in the ground for  
 $\frac{1}{4}$  sec. cor., with brass cap marked

$\frac{1}{4}$

S30 S29

1912

dig pits,  $18 \times 18 \times 12$  ins. N. and S. of  
post, 3 ft. dist, raise a mound  
of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high W.  
of cor.

59.00 Wash in hollow, 30 lks. wide, 5 ft.  
deep drains W.

Note: A box canyon starts about  
4 chs. W.

Enter solid sandstone bedrock,  
beats E. and W.

Subdivision of T. 24 S., R. 17 E.

chain:

- Gradually ascend  
 65.70 Top of sandstone ridge, 35 ft. high,  
 bears E. and W.  
 Descend 25 ft. to  
 80.00 Set an iron post, 3 ft. long, 2 in.  
 in dia., 24 lbs. in a mound of  
 stone and earth, 4 ft. base, 2 ft.  
 high for cor. of secs. 19, 20, 29 and  
 30, with brass cap marked

T 24 S	R 17 E
S 19	S 20
S 30	S 29

1912

raise a mound of stone, 2 ft. base  
 1 1/2 ft. high W. of cor.

Note: On account of natural  
 obstacles I am unable to set post  
 in the ground

Paud, mountainous with a  
 general west drain.

Soil, sand and rocky on rocky  
 sub-soil; 4 th. rate

No timber.

Undergrowth, short shadscale.  
 Some grass for grazing.

Mountainous land \$0.00 ac.

S. 89° 59' E., on random line bet.  
 secs. 20 and 29.

40.00 Set temporary 1/4 sec. cor.  
 79.98 Intersect N. and S. line 3 lks. N.  
 of the cor. of secs. 20, 21, 28 and  
 29

Hence, I run

71.89° 58' W., on true line bet. secs.

20 and 29.

Over mountainous land draining  
 NW, through short undergrowth

Subdivision of T. 24 S., R. 17 E.

chains

of shadscale.

Gradually ascend 35 ft. to

19.00 Low sandstone ridge, bears NW. and S.  
Descend.

24.00 Hollow, 30 ft. deep, drains SW.  
Hence over broken land.

39.99 Set an iron post, 3 ft. long, 1 in. in  
dia., 24 ins. in a mound of stone  
and earth, 4 ft. base, 2 ft. high for  
 $\frac{1}{4}$  sec. cor., with brass cap marked

$\frac{1}{4}$

S 20

S 29

19.12

raise a mound of stone, 2 ft. base,  
 $\frac{1}{4}$  ft. high N. of cor.

Note: On account of natural obstacles  
I am unable to set post in the ground.

41.00 Begin ascent of E. face of ridge.

45.25 Top of sandstone ridge, 75 ft. high  
bears N. and S.

Descend 50 ft. to

57.00 Hollow, drains SW.

Ascend 75 ft. to

65.00 Sandstone ridge, bears NE. and  
SW.

Descend abruptly over ledges.

75.00 Base of ledges, 125 ft. below top,  
bears NE. and S.

Gradually descend.

79.80 Wash, 25 lks. wide, 10 ft. deep,  
drains NW.

79.98 The cor. of secs. 19, 20, 29 and 30.  
Land, mountainous draining  
west to Green river.

Soil, rocky and sandy, on rocky  
sub-soil; 4 th. rate.

Undergrowth, short shadscale  
No timber.

Subdivision of T. 24 S., R. 17 E.

Chains.

	Some grass for grazing purposes.
	June 24: At this sec. cor., I set off $23^{\circ} 26' N.$ , on the decl. arc; and at $12^{\circ} 02' P.M. L.M.T.$ , observe the sun on the meridian; the resulting lat. is $38^{\circ} 43'$ .
	$N. 89^{\circ} 59' W.$ , on random line bet. secs. 19 and 30.
40.00	Set temporary $\frac{1}{4}$ sec. cor.
46.40	Left bank of Green river, Set temp. meander cor.
	To determine distance across river I set a flag on right bank and also erect a signal at this point. From my flag on right bank, I measure a base line $71.0^{\circ} 01' E.$ , 8 chs. to a point from which signal on left bank, bears $S. 56^{\circ} 50' E.$ from the flag the N. end of the base bears $N. 56^{\circ} 50' W.$ , therefore tan $56^{\circ} 51' \times$ base or $1.53107 \times 8 = 12.25$ chs., which added to 46.40 chs. makes
58.65	To right bank of Green river. Set temporary meander cor.
79.40	Intersect W. bdy. of the tp. 21 lots S. of the cor. of secs. 19, 24, 25 and 30 heretofore described Hence I run
	$S. 89^{\circ} 50' E.$ , on true line bet. secs. 19 and 30.
	Over mountainous land facing E. to Green river across solid sandstone bed rock.
	Descend abruptly over ledge 30 ft. high.
0.50	Base of ledge, bears N. and S. Continue to descend.
10.00	Top of ledges, 150 ft. high, bears N.

S. 56° 50' E.  
 N. 89° 59' W.  
 12.25

Subdivision of T. 24 S., R. 17 E.

chains

and S.

Descend abruptly.

16.25 Base of abrupt descent and leave ledges, bears N. and S.

Hence over level river bottom.

20.75 Right bank of Green river.

Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for meander cor. of fract. secs. 19 and 30, with brass cap marked

T 24 S R 17 E

S 19

S 30 MC

1912

dig pit, 36 x 36 x 12 ins., W. of post 8 ft. dist, raise a mound of earth, 4 ft. base, 2 ft. high W. of cor.

33.00 Left bank of Green river

Set an iron post, 3' ft. long, 1 in. in dia, 24 ins. in a mound of stone and earth, 4 ft. base, 2 ft. high for meander cor. of fract. secs. 19 and 30, with brass cap marked

T 24 S R 17 E

MC S 19

S 30

1912

raise a mound of stone, 2 ft. base, 1 1/2 ft. high E. of cor.

Note: On account of natural obstacles I am unable to set post in the ground.

Leave river bottom, ascend abruptly over high ledges.

37.50 Top of ledges and high ridge, 300 ft. above river, bears NE. and SW.

Gradually descend over broken

Subdivision of T. 24 S., R. 17 E.

chains

land across solid sandstone bed rock.

39.40 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in a mound of stone and earth, 4 ft. base, 2 ft. high for  $\frac{1}{4}$  sec. cor., with brass cap marked

$\frac{1}{4}$ ,  
S 19

S 30

1912

raise a mound of stone, 2 ft. base,  $\frac{1}{2}$  ft. high, N. of cor.

Note: On account of natural obstacles I am unable to set post in the ground.

44.00 Begin descent over sandstone ledges.

52.00 Base of ledges, 125 ft. below  $\frac{1}{4}$  sec. cor., bears N. and S.

Gradually descend.

79.40 The cor. of secs. 19, 20, 29 and 30

Land, mountainous draining E. to Green river on W. 20. 75 chs. and W. to same river on E. 46.40 chs. Soil, rocky; 4 th. rate.

Sub-soil rocky:

No timber.

Undergrowth, some scattering shadscale. Willow undergrowth on river bank.

Mountainous land 79.40 chs.

7.0° 03' W., bet. secs. 19 and 20

Over broken mountainous land draining NW. to Green river, through short undergrowth of shadscale.

0.30 Wash, 25 lks. wide, 5 ft. deep, drains NW.

Subdivision of T. 24 S., R. 17 E.

Chains	
	Gradually ascend.
12.00	Enter solid sandstone bed rock, bears E. and W.
32.00	Top of sandstone ridge, 75 ft. high, bears E. and W. Descend 75 ft. to
37.00	Base of ridge, leave solid sand- stone bed rock, bears E. and W.
✓ 40.00	Gradually descend Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for 1/4 sec. cor., with brass cap marked
	$\frac{1}{4}$   S 19   S 20
	1912
	dig pits 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
61.00	Wash at head of hollow, 50 lks. wide, 2 ft. deep, drains W. Ascend 50 ft. to
64.00	Top of bench, bears E. and W. Gradually descend.
66.00	South side of box canyon, bears E. and S. 60° W.
68.50	Descend abruptly 80 ft. over ledges wash, in canyon, 20 lks. wide, drains S. 60° W.
	Ascend abruptly over ledges, 150 ft. to
74.50	Top of ledges and N. side of canyon, bears E. and S. 60° W. Gradually ascend over solid sandstone bed rock.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in a mound of stone and earth, 4 ft. base, 2 ft.

Subdivision of T. 24 S., R. 17 E.

Chains	high for cor. of secs. 17, 18, 19 and 20 with brass cap marked	
	T 24 S.   R. 17 E.	
	S 18	S 17
	S 19	S 20
	1912	

raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.

Note: On account of natural obstacles, I am unable to set post in the ground.

Land, mountainous draining W. to Green river.

Soil, rocky and sandy; 4 th. rate.

Sub-soil, rocky and gravelly.

Undergrowth, some shadscale.

No timber.

Mountainous land 80.00 chs.

June 24, 1912

June 26: At 7<sup>h</sup>. 03<sup>m</sup> a.m. I m.t., I set off  $38^{\circ} 43'$  on the lat. arc;  $23^{\circ} 24'$  N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 17, 18, 19 and 20.

Hence I run

S.  $89^{\circ} 58'$  E., on random line bet. secs. 17 and 20.

Set temporary  $\frac{1}{4}$  sec. cor.

80.08 Intersect N. and S. line  $\frac{9}{16}$  S. of the cor. of secs. 16, 17, 20 and 21.

Hence I run

S.  $89^{\circ} 58'$  W. on true line bet. secs. 17 and 20.

Over mountainous land draining SW., through short undergrowth of shadscale.

27.00 Base of ridge, bears N. and S.

Subdivision of T. 24 S., R. 17 E.

chains

- Ascend abruptly 90 ft. to Ridge, bears N. and S. 5 chs.  
 Descend.
- Top of sandstone ledge, 30 ft. high, bears N. and S.
- Descend abruptly 70 ft. to Set an iron post, 3 ft. long, 1 in. in dia., 12 in. in the ground and 12 in. in a mound of stone and earth 4 ft. base, 1 ft. high for  $\frac{1}{4}$  sec. cor. with brass cap marked  $\frac{1}{4}$ , S 17
- 
- S 20
- 1912
- raise a mound of stone, 2 ft. base  $\frac{1}{4}$  ft. high N. of cor.
- Note: On account of natural obstacles I am unable to set post over 12 in. in the ground.
- Descend over solid sandstone bed rock.
- Top 25 ft. perpendicular sandstone ledge and east side of canyon, bears NE. and SW.
- Descend 50 ft. to Wash in canyon, 15 lks. wide, drains SW.
- Ascend abruptly 125 ft. over ledges.
- Top of ledges and west side of canyon, bears NE. and SW.
- Gradually ascend The cor. of secs. 17, 18, 19 and 20 Land mountainous draining SW. Soil, rocky and sandy; 4 th. rate.
- Sub-soil, rocky.
- No timber.
- Undergrowth, short shadscale

Subdivision of T. 24 S., R. 17 E.

chains.

- Some good grass for grazing on E  
40.04 chs.
- Mountainous land 80.08 chs.
- 
- N.  $89^{\circ} 50'$  W., on random line bet.  
secs. 18 and 19.
- 40.00 Set temporary  $\frac{1}{4}$  sec. cor.
- 79.22 Intersect W. bdy. of the tps. 7 lks.  
S. of the cor. of secs. 13, 18, 19 and 24  
heretofore described.  
Hence, I run  
S.  $89^{\circ} 47'$  E., on true line bet. secs. 18  
and 19.  
Over rough mountainous land  
draining S.  
Descend abruptly over solid  
sandstone bed rock.
- 10.20 Wash in hollow, 20 lks. wide, 170  
ft. deep, drains S.  
Hence ascend over land facing  
nearly W., 200 ft. to
- 39.22 On edge of mesa bears NW. and SE.  
Set an iron post, 3 ft. long, 1 in. in  
dia., 24 ins. in the ground for  $\frac{1}{4}$   
sec. cor., with brass cap marked  
 $\frac{1}{4}$   
S 18
- 
- S 19
- 1912
- raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high N. of cor.  
Hence across flat mesa.
- 144.20 Leave mesa, bears N. and S.  
Descend abruptly 175 ft. to
- 63.20 Hollow, drains SW.  
Ascend 75 ft. over ledges to  
Ridge, bears N. and S.  
Descend 30 ft. to

Subdivision of T. 24 S., R. 17 E.

chains	
79.22	<p>The cor. of secs. 17, 18, 19 and 20.          Land, mountainous draining S.          Soil, rocky; 4% hr. rate.          Sub-soil, rocky.          Undergrowth, some greasewood.          No timber.          Mountainous land 79.22 cha.</p>
71.00	<p>71.0° 03' W. bkt. secs. 17 and 18.          Over mountainous land.          Ascend over solid sandstone bed rock.          Low sandstone ridge, bears E. and W.</p>
15.00	<p>Descend 50 ft. to          Leave solid sandstone bed rock,          bears E. and. W.          Hence gradually descend over sandy          land through short undergrowth          of shadscale.</p>
40.00	<p>Set an iron post, 3 ft. long, 1 in. in          dia., 24 in. in the ground for <math>\frac{1}{4}</math>          sec. cor., with brass cap marked</p>
	$\frac{1}{4}$ , S. 18   S. 17  1912
60.00	<p>dig pits, 18 x 18 x 12 in., N. and S. of          post, 3 ft. dist., raise a mound of          earth, <math>3\frac{1}{4}</math> ft. base, <math>1\frac{1}{2}</math> ft. high W. of          cor.          Marsh, 20 lks. wide, 5 ft. deep,          drains NW.</p>
76.00	<p>Ascend 60 ft. to          Leave sandy land, enter solid          sandstone, bed rock, bears E. and W.          Gradually descend.</p>
80.00	<p>Set an iron post, 3 ft. long, 2 in. in          dia., 24 in. in a mound of stone          and earth 4 ft. base, 2 ft. high for</p>

Subdivision of T. 24 S., R. 17 E.

chain.

cor. of secs. 7, 8, 17 and 18 with brass cap marked.

T 24 S | R 17 E

S 7' | S 8'

S 18 | S 17'

1912.

raise a mound of stone, 2 ft. base  
1 $\frac{1}{2}$  ft. high W. of cor.

Note: On account of natural obstacles  
I am unable to set post in the  
ground.

Land, rolling mountainous with  
a general drain to the west.

Soil, rocky and sandy: 4th and 2nd.  
rates.

Sub-soil, gravelly and rocky.

No timber.

Undergrowth some short shadscale.

Mountainous land 80.00 acs.

June 26: At this sec. cor., I set  
off  $23^{\circ} 22' N.$ , on the decl. arc; and  
at  $12^{\text{h}} 03^{\text{m}} 0\text{:m. l.m.t.}$ , observe  
the sun on the meridian; the  
resulting lat. is  $38^{\circ} 44'$ .

N.  $89^{\circ} 58' E.$ , on random line bet.  
secs. 8 and 17.

Set temporary 1/4 sec. cor.

Intersect N. and S. line 5 lks. N.  
of the cor. of secs. 8, 9, 16 and 17.  
Hence I run

West, on true line bet. secs. 8 and  
17.

Over broken mountainous land  
draining NW, through short  
undergrowth of shadscale.

Ascend 20 ft. to

12.00 Low ridge, bears N. and S.

Subdivision of T. 24 S., R. 17 E.

chains	
	descend 40 ft. to
25.00	Hollow, drains NW.
	Gradually ascend.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked $\frac{1}{4}$ S 8'
	<u>S 17</u>
	19 1/2
	dig pits, 18 x 18 x 12 ins, E. and W. of post, 3 ft. dist, raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
46.00	South point of spur, 30 ft. above hollow, projects S. Gradually descend.
68.00	Enter solid sandstone bed rock, bears NW. and SE.
80.00	The cor. of secs. 7, 8, 17 and 18. Land, mountainous draining NW. Soil, E. 68 chs. sandy and gravelly on rich sandy loam sub-soil; 2nd. rate. W. 12 chs. soil, solid sand- stone bed rock. No timber. Undergrowth, short shadscale. Good grass for grazing on E. 68 chs. Mountainous land 80.00 chs.
	N. $89^{\circ} 47'$ W., on random line bet. secs. 7 and 18.
40.00	Set temporary $\frac{1}{4}$ sec. cor.
79.09	Intersect W. bdy. of the tp. 16 lks. N. of the cor. of secs. 7, 12, 13 and 18 heretofore described. Hence I run S. $89^{\circ} 54'$ E., on true line bet. secs. 7 and 18.

Subdivision of T. 24 S., R. 17 E.

chains.

	Gradually ascend over broken rocky land draining NW, through short undergrowth of shadscale.
39.09	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in a mound of stone and earth, 4 ft. base, 2 ft. high for $\frac{1}{4}$ sec. cor., with brass cap marked
	$\frac{14}{57}$
	$S 18^{\vee}$
	1912
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
	Note: On account of natural obstacles I am unable to set post in the ground.
58.00	Low ridge, 60 ft. above sec. cor., bears N. and S.
	Descend 25 ft. to
69.10	Wash, 20 lks. wide, 2 ft. deep, drains NW.
	Gradually ascend.
79.09	The cor. of secs. 7, 8, 17 and 18 Land, rolling draining NW. Soil, rocky, gravelly and sandy; 14 th. rate.
	Sub-soil, rocky.
	No timber.
	Undergrowth, short shadscale.

	71.0° 03' W., bet. secs. 7 and 8
	Gradually descended over broken mountainous land draining NW. through short undergrowth of shadscale.
30.00	Low ridge, bears N. 80° W. and SE.: Descend abruptly over ledges into

Subdivision of T. 24 S., R. 17 E.

chains.

canyon.

35.25 Wash in canyon 50 lks. wide, 100 ft. below ridge, course W.

Ascend abruptly over ledges 100 ft. to

40.00 Top of N. side of canyon and ledges, bears E. and W.

Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in a mound of stone and earth, 4 ft. base, 2 ft. high for  $\frac{1}{4}$  sec. cor., with brass cap marked

$\frac{1}{4}$	
S7	S8

1912

raise a mound of stone, 2 ft. base,  $\frac{1}{2}$  ft. high W. of cor.

Note: On account of natural obstacles, I am unable to set post in the ground.

Gradually ascend.

53.80 Rocky ridge, bears E. and W.  
Descend 75 ft. to

66.80 Wash in hollow, 50 lks. wide, drains W.

Ascend 70 ft. to

70.00 Narrow rock point, projects W.  
Descend abruptly 75 ft. to

72.00 Hollow, drains W.

Ascend 75 ft. to

80.00 On flat ridge, bears E. and W.  
Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in a mound of stone and earth, 4 ft. base, 2 ft. high for cor. of secs. 5, 6, 7 and 8, with brass cap marked

T24S R17E

S6 S5

S7 S8

1912

Subdivision of T. 24 S., R. 17 E.

chains

raise a mound of stone 2 ft. base,  $1\frac{1}{2}$  ft. high W. of cor.

Note: On account of natural obstacles, I am unable to set post in the ground.

Land, mountainous draining NW.

Soil, rocky; 4 th rate.

Sub-soil, rocky.

No timber.

Undergrowth, short shadscale.

Some grass for grazing.

June 26, 1912.

June 27: At 7<sup>h</sup> 03<sup>m</sup> a.m. l.m.t., I set off  $38^{\circ} 45'$  on the lat. arc,  $23^{\circ} 21' N.$ , on the decl. arc; and determine a meridian with the solar at the cor. of secs. 5, 6, 7 and 8.

Hence I run

East, on random line bet. secs. 5 and 8.

40.90 Set temporary 1/4 sec. cor.

79.96 Intersect N. and S. line, 7 lks. N. of the cor. of secs. 4, 5, 8 and 9.

Hence I run

N.  $89^{\circ} 57' W.$ , on true line bet. secs. 5 and 8.

Over broken mountainous land, through short undergrowth of shadscale.

Ascend 35 ft. to

7.50 Rocky spur, projects S.

Descend 50 ft. to

27.00 Hollow, drains SW.

Ascend 40 ft. to

30.00 Sandy spur, projects S.

Descend 30 ft. to

Subdivision of T. 24 S., R. 17 E.

chains	
39.98	At head of hollow, drains S. Set an iron post, 3 ft. long, 1 in. in dia., 2 1/4 in. in a mound of stone, 4 ft. base, 2 ft. high, for 1/4 sec. cor., with brass cap marked $\frac{1}{4}$ <u>S. 5°</u> S. 8° 1912 raise a mound of stone, 2 ft. base, 1 1/2 ft. high N. of cor. Note: On account of natural obstacles I am unable to set post in the ground. Ascend 30 ft. to Enter flat branch, bears NE. and SW.
42.50	Begin to descend onto lower branch
64.00	and ridge.
79.96	The cor. of secs. 5, 6, 7 and 8 Land mountainous with general westerly drain. Soil, rocky and sandy; 4 th. rate Sub-soil, rocky. No timber. Undergrowth, short shadscale. Mountainous land 79.96 chs.
40.00	N. 89° 54' W., on random line bet. secs. 6 & 7. Set temporary 1/4 sec. cor.
79.00	Intersect W. bdy. of the tp. 5 lks. N. of the cor. of secs. 1, 6, 7 and 12 Leret spoke described. Hence I run S. 89° 56' E., on true line bet. secs. 6 and 7. Gradually ascend over rolling

Subdivision of T. 24 S., R. 17 E.

Chains	
	land draining N. through short undergrowth of shadscale.
36.00	Low ridge, bears N. and S. Leave rolling land, enter mountainous land. Gradually descend over sandstone bed rock.
39.00	Set an iron post, 3 ft. long, 1 in. in dia., 2 1/2 ins. in a mound of stone and earth, 4 ft. base, 2 ft. high for 1/4 sec. cor., with brass cap marked
	<u>1/4</u> <u>S 6'</u> <u>S 7'</u> 19.12
	raise a mound of stone, 2 ft. base, 1 1/2 ft. high N. of cor.
	Note: On account of natural obstacles, I am unable to set post in the ground.
56.50	West side of canyon, bears N. and S.
60.00	Descend abruptly 100 ft. to wash in canyon, 50 lks. wide, drains N.
	Ascend abruptly from canyon over ledges, 125 ft. to
65.00	Top of canyon and sand stone spur, projects SW.
	Descend abruptly over ledges 80 ft. to
71.75	wash in canyon, 25 lks. wide, course SW.
	Ascend 50 ft. over ledges to
72.25	East side of canyon, bears NE. and SW. Hence gradually ascend over solid sandstone bed rock.

Subdivision of T. 24 S., R. 17 E.

Chains	
79.00	<p>The cor. of secs. 5, 6, 7 and 8. Land mountainous and rolling. W. 36 chs. rolling land draining N. Soil, sandy and gravelly on gravelly sub-soil; 2nd rate. Undergrowth, short shadscale. Good grass for grazing. E. 43 chs. mountainous land draining N. soil, rocky on rocky sub-soil; 4th rate. Undergrowth, some short shadscale. No timber. Mountainous land 43.00 chs.</p>
79.80	<p>71.0° 03' W., on random line bet. secs. 5 and 6. Set temporary <math>\frac{1}{4}</math> sec. cor.</p>
140.00	<p>Int. intersect N. bdy. of the tp. 5 lks. E. of the cor. of secs. 5, 6, 31 and 32 heretofore described.</p>
79.80	<p>Hence I run S. 0° 05' E., on true line bet. secs. 5 and 6. Over level land through dense undergrowth of greasewood.</p>
8.80	<p>Red wash, 2 chs. wide, 5 ft. deep, drains W. Gradually ascend.</p>
19.80	<p>Leave level land and greasewood undergrowth, bears. E. and W. Enter rocky land. Ascend abruptly over ledge.</p>
20.00	<p>Top of ledge, 20 ft. high, bears E. and W. Hence over broken mountainous land.</p>
39.80	<p>Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in a mound of stone and earth, 4 ft. base, 2 ft.</p>

Subdivision of T. 24 S., R. 11 E.

Chains:

high for  $\frac{1}{4}$  sec. cor., with brass cap marked

$\frac{1}{4}$   
S 6' | S 5'

1912.

raise a mound of stone, 2 ft. base,  
 $\frac{1}{2}$  ft. high W. of cor.

Note: On account of natural obstacles, I am unable to set post in the ground.

59.80 Ridge, bears E. and W.

descend 50 ft. to

67.80 Wash in canyon, 25 lks. wide,  
course SW.

Ascend 75 ft. to

79.80 The cor. of secs. 5, 6, 7 and 8.

Land, mountainous and level.

N. 19.80 chs. level land draining W.  
Soil, rich sandy loam with sandy  
loam sub-soil; 1<sup>st</sup> rate.

Undergrowth, greasewood about 4 ft.  
high. Good grass for grazing.

S 60. chs. broken mountainous  
land draining NW. Soil, rocky  
on rocky sub-soil; 4<sup>th</sup> rate.

Undergrowth some shadscale  
No timber.

Mountainous land 60.00 chs.

June 27: At the cor. of secs. 5, 6, 31  
and 32 on the N. bdy. of the lp.  
I set off  $23^{\circ} 20' \text{ N.}$ , on the decl.  
arc; and at  $12^{\text{h.}} 03^{\text{m.}}$  p.m. h.m.t.,  
observe the sun on the meridian,  
the resulting lat. is  $38^{\circ} 46'$

Meanders, T. 25 S., R. 17 E.

Meanders of Left bank of Green,  
river, down stream.

I commence at the meander cor.  
of fract. secs. 6 and 31 on the N.  
bdy. of the tp. Heretofore described  
June 27: for solar observation see  
line bet. secs. 5 and 8.

Hence I run with meanders in  
sec. 6.

Over sandy bank through dense  
greasewood undergrowth.

S.  $17^{\circ} 15'$  E., 3.80 chs.

S.  $30^{\circ} 15'$  E., 10.00 chs.

S.  $14^{\circ} 45'$  E., 16.20 chs. At 13.00 chs. mouth

of Red wash, 60 lks. wide,  
course S.  $70^{\circ}$  W.

At 15.40 chs. ascend  
sandstone ledge 50 ft.  
high.

Hence along top of  
ledge bank 60 ft. high.

S.  $17^{\circ} 30'$  W., 12.00 chs.

S.  $53^{\circ} 45'$  W., 10.80 chs.

S.  $68^{\circ} 45'$  W., 8.70 chs.

S.  $76^{\circ} 30'$  W., 12.10 chs.

S.  $79^{\circ} 30'$  W., 33.90 chs. At 0.75 chs. descend  
ledge 60 ft. high.

Hence over sandy  
bank through dense  
willow undergrowth  
and cottonwood  
timber.

At 4.00 chs. mouth  
of canyon wash, 60  
lks. wide, course N.

N.  $85^{\circ}$  W., 4.64 chs. To meander cor.

of fract. secs. 1 and 6  
on the W. bdy. of the  
tp heretofore described

Land level and mountainous.

Meanders. T. 25 S., R. 17 E.

soil, rocky and sandy loam; 4th  
and 1st rates.

Timber, some cottonwoods.

Undergrowth, willow and  
greasewood.

Land mountainous, heavily timbered  
or covered with dense undergrowth.

112.14 chs.

June 25; at 7<sup>h</sup> 02<sup>m</sup> a.m. I m.t., I set  
off  $38^{\circ} 43'$  on the lat. arc;  $23^{\circ} 25' N.$ ,  
on the decl. arc; and determine a  
meridian with the solar at the  
meander cor. of fract. secs. 19 and 24  
on the W. bdy. of the tp. heretofore  
described.

Hence I run with meanders in sec.  
19.

Along top of ledge bank, 100 ft. high.  
 $S. 88^{\circ} 30' E.$ , 14.50 chs. At 8 chs. hollow  
drains S.

$S. 56^{\circ} E.$ , 12.00 chs. Descend from ledge  
to rocky bank and  
some willow under-  
growth.

$S. 62^{\circ} 30' E.$ , 9.40 chs.

$S. 48^{\circ} E.$ , 10.00 chs.

$S. 53^{\circ} E.$ , 11.00 chs. At 6 chs. wash,  
25 lks. wide, course  
SW.

$S. 15^{\circ} E.$ , 12.20 chs.

$S. 12^{\circ} W.$ , 10.50 chs. At 2 chs. mouth of  
canyon wash, 1 ch.  
wide, course W.

$S. 21^{\circ} 30' W.$ , 14.50 chs. At 50 lks. wash  
50 lks. wide, course  
W.

$S. 30^{\circ} 30' W.$ , 10.50 chs.

$S. 37^{\circ} 30' W.$ , 10.00 chs. To meander cor.

Meanders, T. 24 S., R. 17 E.

chain

frac. secs. 19 and 30.

Land, river bottom and mountainous.  
Soil, rocky; 4 th. rate

No timber.

Undergrowth willow.

Land mountainous or covered with  
undergrowth 114.60 chs.

Hence in sec. 30

Over rocky bank through willow  
undergrowth:

S. 45° 30' W., 9.40 chs.

S. 43° W., 6.40 chs.,

S. 27° 30' W., 4.60 chs.,

S. 46° W., 6.20 chs.,

S. 74° W., 16.00 chs., at 4 chs. mouth  
of canyon wash,

valley wide,

course N.W.

To meander cor.

frac. secs. 25 and

30 on the W. bdy

of the tp heretofore

described.

Land level.

Soil, rocky; 4 th. rate

Timber, a few cottonwoods.

Undergrowth, willow on 42.60 chs.

Hence in sec. 30 from meander  
cor. 75.90 chs. S. of the cor. of secs.  
19, 24, 25 and 30 heretofore described  
Over sandy bank through dense  
willow undergrowth

S. 60° 30' E. 8.20 chs. to meander cor.  
frac. secs. 30 and 31

Land, river bottom

Soil, sandy loam; 1st. rate

Undergrowth, willow 8.20 chs.

Meanders, T. & S., R. 17 E.

No timber.

Hence in sec. 31.

Over sandy bank through willow undergrowth.

S.  $57^{\circ} 30'$  E. 17.50 chs. At 14 chs. Wash. 30 ft. wide, coarse S. W. Lavor <sup>dark</sup> undergrowth and sandy bank. Hence over rocky bank.

S.  $117^{\circ}$  E., 26.00 chs.

S.  $24^{\circ}$  E., 8.20 chs.

S.  $1^{\circ}$  E., 7.50 chs.

S.  $6^{\circ} 45'$  W., 15.20 chs.

S.  $32^{\circ} 30'$  W., 7.00 chs.

S.  $22^{\circ} 30'$  W., 7.50 chs.

S.  $25^{\circ} 32'$  W., 11.03 chs. to meander cor.

fract. secs. 6 and 31  
on the S. bdy. of the  
tp. 37.60 chs. S.  $89^{\circ} 59' 8''$   
of cor. of T5. 24 + 25 S,  
R. 16 + 17 E. heretofore  
described

Sand, level.

Soil, rocky and sandy; 1<sup>st</sup> & 1<sup>st</sup>. rates  
No timber.

Undergrowth willow. 98.93 chs.

June 25: At this cor., I set off  $33^{\circ} 24'$  N., on the decl. arc; and at 12<sup>h</sup> 0<sup>m</sup>. P. M. P. M. f., observe the sun on the meridian, the resulting lat. is  $38^{\circ} 41'$ .

June 22: for solar observation see line bet. secs. 29 and 31.

Hence in sec. 31, from meander cor. of fract. secs. 6 and 31, 73.40 chs. S.  $89^{\circ} 59'$  E. of the cor. of T5. 24 and 25 S., R. 16 + 17 E., heretofore described. On top sandstone ledge bank 75 ft

Meanders, T. 24 S., R. 17 E.

High:

N.  $51^{\circ} 30'$  E., 5.10 chs.

N.  $47^{\circ} 45'$  E., 3.25 chs. to meander cor  
frac. secs. 31 and 32.

Land, level.

Soil, rocky; v th. rate.

No timber.

No Undergrowth.

Hence in sec. 32.

on top rocky ledges over river.

N.  $59^{\circ} 30'$  E., 12.70 chs. at 7 chs. mouth  
of wash, 1 ch. wide,  
course S.

S.  $89^{\circ}$  E., 6.50 chs.

S.  $67^{\circ} 30'$  E., 10.00 chs.

S.  $50^{\circ} 04'$  E., 12.04 chs., to meander cor  
frac. secs. 5 and  
32 on the S. bdy.  
of the tp. heretofore  
described.

Land, mountainous.

Soil, rocky; v th. rate.

No timber

No Undergrowth.

Mountainous land, 41.24 chs.

Meanders of right bank of Green  
river up stream.

June 25: I commence at the  
meander cor. of frac. secs. 6 and  
31 on the S. bdy. of the tp. heretofore  
described.

Hence I run with meanders in  
sec. 31.

over sandy bank through willow  
undergrowth.

N.  $28^{\circ} 30'$  E., 7.50 chs.

N.  $26^{\circ} 30'$  E., 14.00 chs.

Meanders T. 24 S., R. 17 E.

N.  $18^{\circ}$  E., 500 chs.

N.  $5^{\circ}$  E., 7.50 chs.

N.  $21^{\circ} 30'$  W., 1000 chs. to mouth wash, 1 ch. wide. Course E.

Leave sandy bank and willow undergrowth. I am unable to follow river from this point on account of impassable ledges. Hence.

N.  $43^{\circ} 30'$  W., 17.30 chs: Ascend over ledges.

At 8. chs. river bears

N.  $46^{\circ} 30'$  E., 3 chs. dist.

At 17.30 chs. river bears

N.  $46^{\circ} 30'$  E. 4.50 chs.

N.  $51^{\circ} 30'$  W., 22.80 chs. At 10 chs: river bears

N.  $38^{\circ} 30'$  E. 6.00 chs.

To west ness cor. To the meander cor. fract. secs. 31 and 36 on the W. bdy. of the tp. 12.55 chs. S. of the true cor. point of secs. 25, 30, 31 and 36 heretofore described.

Land, level and mountainous. Soil, sandy and rocky; 1st and 4th. rates.

No timber.

Undergrowth willow on 400 chs.

Mountainous land 40.10 chs.

Hence in sec. 30 from Meander cor. 13.95 chs. S. of cor. of secs. 19, 24, 25 and 30.

Over sandy bank, through willow undergrowth and scattering cottonwood timber.

N.  $70^{\circ} 15'$  E., 12.30 chs.

N.  $117^{\circ}$  E., 6.50 chs.

Meanders, T. 24 S., R. 17 E.

N.  $40^{\circ} 30'$  E., 7.02 chs. to meander cor.  
frac. secs. 19 and 30  
Land, level.  
Soil, sandy loam; 1st. rate  
Timber cottonwood on 36.02 chs.  
Undergrowth willow on 26.02 chs.

Hence in sec. 19.  
Over sandy bank through willow  
undergrowth.  
N.  $37^{\circ}$  E., 8.60 chs.  
N.  $43^{\circ}$  E., 11.50 chs. At 7 chs. wash, 20 lks.  
wide course E.  
N.  $19^{\circ}$  E., 6.00 chs.,  
N.  $23^{\circ} 30'$  E., 11.00 chs.,  
N.  $21^{\circ} 45'$  E., 9.30 chs.,  
N.  $22^{\circ}$  W., 6.00 chs.,  
N.  $46^{\circ} 30'$  W., 12.00 chs.  
N.  $43^{\circ}$  W., 6.70 chs., at 3.50 chs. wash,  
20 lks. wide, coarse  
NE.

N.  $61^{\circ}$  W., 9.00 chs.,  
N.  $66^{\circ}$  W., 8.90 chs.,  
N.  $85^{\circ}$  W., 12.00 chs. to meander cor.  
frac. secs. 19 and 24  
on the W. bdy. of the  
tp heretofore described

Land, level river bottom

Soil, sandy loam; 1st. rate  
No timber.

Undergrowth willow, 101.00 chs.

June 25, 1912.

June 27.

Hence in sec 6.

On top ledge bank 60 ft. high.

N.  $75^{\circ} 30'$  E., 13.30 chs. At 3.00 chs.  
wash, 50 lks. wide,  
course S.

Meanders, T. 24 S., R. 17 E

N.  $74^{\circ} 15'$  E., 14.90 chs.  
S.  $86^{\circ} 15'$  E., 6.50 chs. Leave ledge bank  
Enter dense willow  
undergrowth and  
scattering Cottonwood  
timber.

N.  $83^{\circ} 30'$  E., 16.00 chs. Wash,  
50 lks. wide, coarse  
S.

N.  $74^{\circ}$  E., 5.20 chs.  
N.  $44^{\circ} 30'$  E., 2.80 chs., Leave dense willow  
undergrowth.

N.  $6^{\circ}$  E., 17.00 chs.,  
N.  $43^{\circ} 15'$  W., 4.00 chs., top ledge bank 50  
ft. high.

N.  $15^{\circ}$  W., 10.80 chs.,  
N.  $27^{\circ} 15'$  W., 8.70 chs. to meander cor.  
frac. secs. 6 and 31  
on the N. bdy. of the  
tp. heretofore  
described.

Land, rolling  
Soil, rocky, and sandy loam; 4th  
and 1st. rate.

Timber, scattering Cottonwood on  
45.00 chs.

Undergrowth, willow on 45.00 chs.

June 27, 1912

## General Description.

This township contains nearly every variety of land from rolling brush lands to rough mountains. The soil along the Green river and in the central and north eastern part of the tp. is generally a rich sandy loam, capable of producing abundant crops with irrigation. The soil of the remaining part is practically all rocky or sandstone formation and may be classed as 4 th. rate.

A vast amount of brush grass prevails over the entire townships and affords excellent feed for sheep and cattle during the winter months. The land lying SE. of ten mile canyon is very rough the greater portion consisting of huge white sandstone pinnacles and outcroppings.

Cottonwood timber is found along the Green river while a scrub growth of cedar and piñon is found in the south eastern part of the tp. The greater part of the township is covered with a short undergrowth of shadscale and along the river dense willow is found. The township is well watered by the Green river which flows through the western part in a southerly direction and by Ten mile Creek which flows in a south westerly direction through the tp. The water in Ten mile Creek contains much alkali.

There are no indications of mineral in the tp.

There are no settlers in the tp. The chief value of the land in this township is for grazing of sheep and cattle during the winter

General description

months:

Howard W. Miller,  
U. S. Surveyor.

Volume

#

R0392



FINAL OATH OF UNITED STATES SURVEYOR.

I, Howard W. Miller, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for Utah, bearing date of the 27 day of March, 1911, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of East, South, and North Boundaries, and the subdivision and meanders of Township 24 South, Range 17 East.

of the Salt Lake  
Base Meridian, in the State of Utah, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for Utah, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

*Howard W. Miller.*  
*U. S. Surveyor.*

Subscribed by said Howard W. Miller, and sworn to before me  
this 2 day of February, 1914.

  
*James D. Bell*  
U. S. Surveyor General  
for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 14, 1914.

The foregoing field notes of the survey of the subdivisional and meander lines of Township No. 24 South, Range No. 17 East of the Salt Lake Base and Meridian, Utah,

executed by Howard W. Miller

under his special instructions dated March 27, 1911, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

*James D. Bell*  
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in \_\_\_\_\_, has been correctly copied from the original notes on file in this office.